

BEFORE THE ENVIRONMENTAL APPEALS BOARD
FOR THE STATE OF DELAWARE

AIDRIENNE HEGMAN,

Appellant,

v.

SECRETARY OF THE DEPARTMENT OF
NATURAL RESOURCES AND ENVIRONMENTAL,
CONTROL OF THE STATE OF DELAWARE,

AND

EASTERN SHORE ENVIRONMENTAL, INC.,

Appellees.

Appeal No. 2000-10

FINAL ORDER AND DECISION

Pursuant to due notice of time and place of hearing served on all parties in interest, the above stated cause came before the Environmental Appeals Board on June 11, 2002, in the Auditorium, Richardson & Robbins Building, 89 Kings Highway, Dover, Kent County, Delaware. The matter was continued on June 18, 2002, June 25, 2002 and concluded on July 23, 2002.

PRESENT:

Joan Donoho, Acting-Chairman

Stanley Tocker, Ph.D, Member

Peter McLaughlin, Member

Gordon Wood, Member

Kevin R. Slattery, Attorney for the Board.

APPEARANCES:

Jeremy Homer, Esquire, for the Appellant, Adrienne Hegman, and Intervenor, Delaware

Solid Waste Authority

William Manning, Esquire, and Richard Forsten, Esquire, for the Appellee, Eastern

Shore Environmental

Capt. George Konoval, Esquire, Capt. Carey Merrill, Esquire, and Lt. Col. Joseph Miller,

Esquire for the Intervenor, Dover Air Force Base

Virginia Gibson-Mason, Assistant U.S. Attorney, local counsel for the Dover Air Force

Base

Kevin Maloney, Deputy Attorney General, for the Agency, DNREC

A hearing was held before the Environmental Appeals Board ("Board") on June 11, 2002, pursuant to the appeal of Adrienne Hegman ("Hegman" or "appellant") who opposes the granting of a permit by the Department of Natural Resources and Environmental Control ("DNREC" or the "Agency") to the appellee, Eastern Shore Environmental, Inc. ("ESE"), for the processing of municipal solid waste at its transfer station site on Postles Corner Road west of Dover. The hearing was continued on June 18, 2002, June 25, 2002 and concluded on July 23, 2002. At a previous motions' hearing held on March 12, 2002, the Board considered, and subsequently granted, motions by the Dover Air Force Base ("DAFB") and the Delaware Solid Waste Authority ("DSWA") to intervene in this matter.

It is the appellant's, Hegman's, and the DSWA's contention that the permit should be revoked or remanded back to DNREC. The ESE facility was originally processing "dry" solid waste up to 18,000 tons per year. The new permit allows ESE to process 192,000 tons of municipal solid waste ("MSW") per year--equivalent to all the waste processed in Kent County in a year. This is an environmental concern. The site is not in an industrial area and it is in a small community. It is near the DAFB, wetlands, and residential housing. One would have expected DNREC to give equal or greater scrutiny to this permit given its location--including the zoning status. One would have expected DNREC to have conducted workshops, a public hearing, and consulted with the DSWA on this application. None of this occurred. The DSWA specifically requested notice regarding changes at this site from DNREC, and this was not given. The first notice given to the DSWA was when the permit was issued. DNREC disregarded a number of its own regulations--including obtaining the zoning approvals--in processing the application. There was no

hydrogeological study and no traffic study performed (even with the huge increase in volume). The application does not contain any real environmental analysis--just a superficial processing. The processing of the ESE application was nothing like what DNREC requires for a DSWA transfer station.

Hegman/DSWA also contends that the permitting statute requires the zoning to be appropriate. DNREC did not follow the statute. Kent County indicated the zoning was not appropriate shortly after the permit was issued. The dispute over what was said should not be an issue--DNREC should have gotten a certificate from the county which it did not do and would not have gotten in this case. ESE will argue it did what it was told to do, and that DNREC's mistakes should not prejudice them. The issue here is not whether ESE made mistakes, but whether DNREC made mistakes.

Hegman/DSWA further contends that the DAFB was completely cut out of the process.

Eastern Shore Environmental ("ESE") waived its opening statement.

The DAFB contends that by allowing the facility within 1,200 feet of the DAFB primary runway, there is the risk of bird strikes. They further contend there were a number of mistakes that will invalidate the permit. The DAFB has a worldwide airlift function. It is the largest airport for the federal government--48,000 flights annually. MSW is a bird attractant. The consequences of a bird strike can be disastrous. The placement of this facility next to the runway will focus the birds in this area. ESE is handling a small portion of its capacity currently. No prior bird surveys were done, and those done are "snapshots" only and cannot be extrapolated over time. The closed facility argument will not last when

the amount of garbage increases--including that on the road and grounds. This is not an enclosed facility. The Federal Aviation Administration ("FAA") considers the placement of this facility incompatible with the use of the DAFB. The FAA recommends such facilities have at least 10,000 feet separation from airports--more if the facility is within bird flight paths. ESE does not have an FAA waiver to operate its facility, and DNREC did not investigate why ESE did not seek such a waiver. The birds now at TILCON will move to the food source at ESE--the facilities are at opposite ends of the runway--and will pose a greater risk. The DAFB contends that the Board needs to revoke the permit or remand the matter to the Secretary to properly apply DNREC's regulations.

As for the processing of the application, DAFB contends that it was not consulted regarding the effect the changes to the ESE facility might have on the DAFB. ESE did not reasonably notify its neighbor. DNREC did not follow its own regulations and statutory guidelines. This allowed ESE to alter the nature of its facility. They did not obtain the appropriate zoning. DNREC did not require the type of proof it normally requires with respect to zoning. DNREC did not seek from ESE the FAA waiver. Had it done so, the ESE facility would likely not be processing MSW today.

It is the agency's, DNREC's, position that the permit modification process is not understood by the appellants. In February 2000, ESE requested a "modification" of its existing permit. It is not a new permit or a new site. It has been operating as a regulated site for years. There are also two types of modifications--"major" and "minor". The application did not change the nature of the facility: it was and is a transfer station--not a resource recovery facility. On April 19, 2000, DNREC published its notice of the

application. No one requested a public hearing or submitted comments to the Secretary. The Secretary need not hold a hearing when no one requests one or submits any comments. It may have been a mistake on the part of the appellants, but it does not justify changing the outcome. The issue to be addressed on appeal is whether the decision of the Secretary was proper. Sections 10, 4(D) and 4(E) of the solid waste regulations are not applicable here--only to new sites and facility. In this case, while DNREC was not required to follow them, it required basically the same information (with minor exceptions). On the zoning issue, DNREC will show that they obtained information from Kent County that the zoning was proper, and further that Kent County had notified ESE it had the appropriate approval. This is a case about "market share" and not the environment. DSWA's motives here are suspect.

SUMMARY OF THE EVIDENCE

1) The Board considered the testimony of Mr. Kelly Crumpley.

Mr. Crumpley testified that he is employed by Kent County, and at the time of the relevant events in this case, he was a Planner Technician II. He has a B.A. in Political Science and a law degree. He worked in the oil and gas field, and he has worked in various construction related industries prior to employment with Kent County.

Mr. Crumpley testified that he was stationed at the front desk and did some site planning. A site plan review (especially if it is a revision of an existing plan) consists of reviewing buildings, setbacks, and the physical layout of the property. In assessing the site plan, they review the preliminary plan to see if there is any new construction. If there is no

new site plan approval required, he will orally inform the party that no approval is required. He does not review the type of use. The site plan review is based upon the physical property and the structures only.

A use review is different. That process requires more detail. There must be a written statement by the applicant. They look at the zoning ordinances to determine if the use is permitted. A response to this is in writing. It is also reviewed by a higher level in the Kent County government--at least the planning supervisor. A conditional use approval is also different. Some uses need approval from the Kent County Levy Court. They usually have conditions attached. The Levy Court determines if the use meets the County's requirements and also considers safety issues. It usually involves a public hearing before the Planning Board and the Levy Court. A change such as the one in this case would require a conditional use approval.

In this case, the witness was contacted over the telephone regarding a site plan. The modifications were to extend the current structure. During the course of the discussion, the applicant determined it could accomplish its purpose without increasing the footprint of the building. He consulted with the planning supervisor and told ESE it did not need to go through the site planning review. ESE told him it was not changing the use of the facility. No use review was conducted.

In reference to Hegman/DSWA Exhibit #6 (a letter from Sean Callahan of Lane Engineering to himself), the witness testified that the letter indicates the plans for the renovation of the structure--including a reference to a zoning compliance letter from Kent County to be submitted to DNREC. The holding tank reference did not raise a red flag

because there is no distinction in Kent County between a dry waste and MSW transfer station facility. Kent County did not submit a letter of zoning compliance to DNREC as indicated in the letter. Had they reviewed the use, there would have been a different review and a letter would have issued.

With regard to his conversations with Janet Manchester of DNREC, the witness testified that he reviewed her affidavit (Hegman/DSWA Exhibit #8). There was some confusion on his part. Ms. Manchester kept asking about zoning, and he did not understand what she was asking about because the only review was for the site plan and not for the use. Ms. Manchester told him it was a dry waste transfer station. He may have told her that there was nothing further needed for the review of the site plan, but he doubts he knew at the time that Kent County made no distinction between a dry waste and MSW transfer station. He did not know what the use was, and he did not make any representations about the zoning use.

On cross examination by ESE, Mr. Crumpley testified that his first contact with ESE was with Mr. Callahan from Lane Engineering. There was no discussion of use. The first discussion would have been at the pre-application meeting on January 21, 2000. ESE indicated they were contemplating dealing with MSW. The review did not involve a review of the use. He was told the use would not change. If the use was not changed, then he may have indicated that no change would be required. He does not recall saying this to Ms. Manchester. He spoke to Mr. Ron Reed before calling Ms. Manchester back.

On cross examination by the DAFB, Mr. Crumpley testified that he does not recall speaking with Mr. Callahan on more than one occasion. While there was some confusion

as to what he was asking, they usually wait for the applicant to "pound on the door" to get what they need. They usually do not look beyond what is provided to them by the applicant. There is no requirement to go further. A transfer station is a conditional use within an I.G. (general industrial) zoning district.

On cross by DNREC, the witness testified that when he reviewed the site plan the assumption was that the use was already in compliance. In his opinion, if ESE has not received a conditional use approval, it may be out of compliance with the zoning ordinances.

On re-direct examination, Mr. Crumpley testified that eventually Kent County determined there was a change in use that needed a conditional use approval. Kent County's position is that the change occurred when they started processing dry waste and changed from a reclamation facility. Kent County eventually did a review and determined that a conditional use was not previously granted.

On re-cross by ESE the witness testified that he is not sure that a reclamation center use exists any longer as a classification. He believes he probably did not tell Janet Manchester that his review was only in connection with the site plan review. He knows what he meant when he responded to her question. He is not familiar with DNREC's permitting process.

On re-cross by DNREC the witness testified that he was not aware that DNREC required zoning approval to issue the permit. He did not ask directly why Ms. Manchester was calling.

2) The Board considered the testimony of Ms. Constance Holland.

Ms. Holland testified that she is employed by the State of Delaware as the Director of State Planning. Previously she was employed by Kent County as the Director of Planning Services.

Ms. Holland testified that she had a good relationship with DNREC. They knew applicants needed septic approvals, and they often referred applicants to Kent County. Zoning certifications were filed at the desks by the lower level planners--i.e. such as septic approvals. With regard to her affidavit of 2001 (Hegman/DSWA Exhibit #9), Ms. Holland testified that a complaint was lodged regarding the ESE site. When she asked if anyone in the office knew of it, Mr. Crumpley came forward. They reviewed the plan. It was a site plan review with the understanding that the use was not changing. Her letter of July 12, 2000 to Secretary DiPasquale was done after the use review (Hegman/DSWA Exhibit #10). She was there for the approval for the reclamation center. Mr. Duerr was only going to take paper and plastics. When it was explained the site was taking solid waste, she felt there was a change in the use. The letter to Secretary DiPasquale explained this. It was to notify DNREC and to express a hope to meet with the applicant and go through the conditional use process. She discussed this with Janet Manchester and Ms. Marker when they called about the "retraction" (a poor choice of word according to the witness as this was actually the first decision made by Kent County).

The witness testified that ESE subsequently filed for conditional use approval. At a pre-application meeting it was related that Kelly Crumpley did not have all the facts. The application was tabled several times. ESE was not sure they should go through the

conditional use process or go to the Board of Adjustment. There was a hearing before the Levy Court, and the application was tabled because the bird issue was not something they had considered. She was not at the hearing. The application was withdrawn before a final vote occurred before the Levy Court.

The witness further testified that when someone requests a zoning certification, they go back and do a lot of background research. They then refer to the zoning unified code. A document is filled out and signed by a supervisor. In this case, had DNREC requested the zoning certificate, they would not have gotten it for the presumed zoning. We would not be in this situation if DNREC had asked for the zoning certificate.

On cross-examination by ESE, Ms. Holland testified that she received two complaints: one from Mr. Mark Dunkle and one from a citizen from Little Creek (Adrienne Hegman). Mr. Dunkle asked whether the County was aware of the facility and the zoning for the property. She needed to research the facility. This is when Mr. Crumpley came forward. Reclamation centers are no longer in the zoning code. They are permitted, but research in the SIC would have to be done to determine the zoning district in which it would fall. It is a conditional use. If you have a conditional use, you can continue to operate under the permit until you stop using it for that purpose or expand beyond a 25% increase in the use. If the facility is not expanding, it is a legal, non-conforming use. In her opinion, the change was that Mr. Duerr indicated he would no longer be doing MSW. She was not aware he had been taking household waste. If you stop taking a certain form of waste (or use) for more than one year, you are no longer grandfathered. In good faith, Kent County believed at the time that Mr. Duerr was going to process dry waste only. She disagrees

with Mr. Crumpley that there is no distinction between a dry waste and MSW transfer station. In the County's eye, the site was never a transfer station. She believes the use was converted by a Mr. Bandurski prior to ESE coming on the scene.

On cross-examination by DAFB, Ms. Holland testified that if there had been a conditional use application, DAFB would have been directly notified. Under a site plan review, they would not have been notified. It is in the comprehensive plan that Kent County will work with the DAFB and notify them about any changes.

On cross-examination by DNREC, Ms. Holland testified that she spoke one time with Janet Manchester and Nancy Marker. Mr. Crumpley told her that he told ESE that no changes were needed since they were only doing interior and exterior renovations and would not be altering the foot plan. She is not sure that Mr. Crumpley told her what he had told Janet Manchester. She assumes it was the same as what he told ESE. As of July 12, 2000, she had determined that the facility had expanded beyond its permitted use. Following the July 20th letter from Secretary DiPasquale, she found the suggestion to take it up with ESE to be reasonable. As she was in charge of the inspection office, it was the policy of Kent County not to pursue violations if the applicant was attempting to come into compliance. At the time, ESE had applied for a conditional use permit. In her opinion, DNREC needed a written document (a zoning certification), and they should have gotten one.

On re-cross examination by ESE, Ms. Holland testified that not every person has to request a zoning certification in writing. In almost every real estate transaction one is requested in writing. The verbal representation is not enough.

3) The Board considered the testimony of Mr. Eugene LeBoeuf.

Mr. LeBoeuf testified that he works for the Air Force Safety Center and is the Chief of the Air Force Bird/Wildlife Aircraft Strike Hazard ("BASH") team. The purpose of the team is to reduce wildlife hazards for aircraft. The team includes five people who work worldwide. Mr. LeBoeuf outlined his background and credentials. He worked for the FAA doing similar work prior to being recruited by the Air Force. They work on policies and programs and assist regional commands to make sure BASH programs are implemented properly. They do modeling to make sure aircraft and birds are kept separated. There were no objections to Mr. LeBoeuf's expertise.

The witness testified that he reviewed the BASH plan at DAFB in 1995. There are the TILCON ponds that are bird attractants. Other wildlife hazards include snow geese during the winter. There is a "baseline" of birds at DAFB as it can count on the snow geese during the winter and seagulls. There already exists a resident bird hazard. The issue is not snow geese because they do not frequent landfills. Once you bring putrescible waste to one site, it becomes an attractant. Over time, it becomes more attractive to the birds.

The witness testified that he was the primary author of the FAA advisory circular 5200-33. That document provides guidance regarding land use practices for wildlife avoidance. It initially addressed only landfills, so they defined a number of different waste disposal type facilities. They utilized Dr. Dolbeer's work for compost sites, but only for that section. The witness testified that his replacement at the FAA was Mr. Ed Cleary who completed the advisory circular. The Air Force utilizes the circular--they meet or exceed

FAA regulations.

The witness further testified that waste transfer stations were meant to be included in the context of the circular. They are safe only if they are totally enclosed. The waste must be encapsulated from the time it approaches the facility. It is possible transfer stations are acceptable--but only if they are totally enclosed. If they are partially enclosed then the siting criteria for putrescible waste must be followed. The ESE facility is a partially enclosed facility and would fall within the 10,000 foot minimum separation distance requirement. Due to the water site at the other end of the runway, the five mile minimum separation distance could be applicable.

The witness testified that there is a totally enclosed facility near Atlantic City. At that site there are vestibule openings--"air locks" (double doors)--and the trucks are enclosed. There are active bird deterrents as well. Even a closed facility could cause problems. This facility is not operating as intended as it was too cumbersome. The plastic "strips" covering the openings were once full length, but they are now 1/3 length because they got hung up on the trucks. There is so much traffic now that the doors never close. The trucks go into the facility completely before dumping their loads. The facility is four to five times larger than ESE's. They can maneuver inside the building in order to dump their load. The doors must be closed in order to keep the garbage out of the site of birds. They have ventilation at the Atlantic County facility and can totally seal the facility. This facility is just outside of a 10,000 foot arc from the airport. At 10,000 feet, a turbine-powered aircraft should reach 500 feet of altitude--below this point most bird strikes occur.

The witness testified that he visited the ESE site last June at the request of DAFB,

and he was given a tour of the facility. It is within 1500 feet of the runway, and while he was at the facility he observed A-10's (twin-engine jets) training overhead. It is an unremarkable transfer site--clean and small. The trucks were untarpping outside the building. They tip in the doorway and a front end loader moves the trash to the back of the building. He was surprised he had not heard of the facility before this and felt it had fallen through the cracks. The FAA is supposed to be notified of wildlife attractants near airports. Usually at the time the permits are posted.

In meeting with ESE, they showed what they had done to keep the bird level down. It was just the building. It would be handling 660 tons per day. He sees a problem with handling putrescible waste that close to the runway. Based upon his assessment, he contacted Colonel Gilbert--the wing commander at DAFB. In his opinion he felt it was a well run facility, but the mere fact of the size of the waste stream combined with the baseline of birds already present was of sufficient concern. Furthermore, the TILCON ponds creates a further problem as they are diagonally opposed to the ESE facility across the runways. This would fall within the criteria for the 5 mile separation distance radius. The facility is a partially enclosed facility. On a subsequent visit where he viewed the facility through the fence, the doors were open, and the MSW door had a dent. It cannot compare to the Atlantic County site--Atlantic County is a more tightly run facility.

The witness testified that if there is a bird strike (even if the bird does not get ingested in the engine), it can cause a catastrophic event. A "hot abort" at the point of refusal is a dangerous situation. The brakes are heating up at the point where the plane is carrying a full load of fuel. He has investigated such catastrophic events. Fortunately,

most occur in fighter aircraft. The Air Force has lost 33 people since 1985 due to bird strikes. He cannot predict how birds will react over time to this facility, therefore, he will always err on the side of safety.

On cross examination by ESE, Mr. LeBoeuf testified that if the ESE facility were totally enclosed, then it would "generally" be compatible. Given the resident bird population, however, he would say it is not compatible. He is not convinced this facility could be made wildlife free. He has not been at the Atlantic County facility for quite some time. He is aware there are bird problems. The problems are associated with the entire site--transfer station and the landfill associated with it. He cannot tell whether the untarped trucks at the ESE facility contain MSW. Because waste at ESE is not dumped inside the building it poses a hazard. The volume of putrescible waste at the present time is small. Over time, even small bits blown off trucks can add up--it doesn't take much. He has not seen TILCON birds attracted and traveling to the ESE facility.

On cross examination by DNREC, Mr. LeBoeuf testified that he is not aware of the DAFB working with Kent County to utilize Kent County's zoning authority to implement ordinances to affect bird attractant problems. They have been working with TILCON.

4) The Board considered the testimony of Mr. Thomas Houska, P.E.

Mr. Houska testified that he is employed by the DSWA and is a licensed professional engineer in Delaware. He is currently the Chief of Administrative Services. He does strategic planning, financial planning, and regulatory compliance among other duties. The DSWA was formed in 1975 to protect groundwater supplies. The local

governments did not have the ability to deal with this issue. The DSWA is financed through user fees. They also have approximately \$65 million in bond debt. Waste haulers need a license through the DSWA to collect the garbage. There is no fee, but it helps the DSWA track the haulers. Transfer stations--including privately owned stations--must provide monthly reports on their activities. There are two such facilities in Delaware--one is ESE. They can dump at DSWA facilities provided the waste originates in-state. The DSWA is barred from accepting out-of-state waste.

The witness further testified that the permit in question is important because it is a major permit. It would be the fourth largest permitted facility in the state. As a result, it is important to make sure all the issues were addressed to protect the public. In 1999 the transport tonnage reported to DNREC by Bandurski was 18,000 tons (DSWA Exhibit #18, attachment #5)--less than 1/8th of the amount permitted for the ESE facility. In Kent County, 120,000 tons per year on average of MSW are processed. In Sussex the amount is 160,000 tons per year. The permit here will handle about the same as all of Kent County produces in a year. The Waste Management site in Newport handles approximately 19,000 tons per year. The Pine Tree Corners site handles southern New Castle County. It is a Pigeon Point transfer station and handles 107,000 tons per year. It is the largest transfer station in the state to date. The witness estimates the traffic in and out of the ESE site at full, permitted capacity to be 400 trips per day (DSWA Exhibit #18, attachment #4).

Prior to the ESE application being filed, the DSWA requested of DNREC that it have the opportunity to comment on any application from the Bandurski site to increase capacity. Ms. Nancy Marker of DNREC indicated they would let DSWA know about it prior

to the permit being issued. They found out about the ESE permit being issued on the day it was issued.

The witness further testified that DSWA has gone through the process of designing transfer stations and having them permitted. DNREC regulations drive the process. The cost for the contract to design such a facility is \$1.5 million. When it renewed the permit for the Pine Tree Corners station it had to file for a new permit. They went through the same scrutiny for the renewal as if it was a new facility. With the quantity of waste to be processed by ESE, the permit application should have raised flags. The witness compared the size of the Pine Tree Corners renewal application (Hegman/DSWA Exhibit #20)(over one inch thick) to the ESE application (Hegman/DSWA Exhibit #2)(less than 1/4 inch thick).

Notwithstanding an objection regarding the relevance of comparing a permit renewal application to a permit modification application (i.e., comparing apples and oranges), the witness outlined the differences between the two applications (Hegman/DSWA Exhibit #19-DNREC permit requirements). The witness testified that DNREC does not distinguish in its regulations between a renewal or a modification application. Both require an engineering report. None was done for ESE. There was a cursory site plan and a "push wall" (which is a major element of a transfer station). It was done by Lane Engineering which is not licensed in Delaware. Also there is a hydrogeological assessment requirement. Lechate is an important consideration, and the hydrogeological assessment is important to determine potential impacts if the lechate tank were to fail. DNREC indicated ESE didn't need to do one. On the eastern border of the ESE facility, there is a wetlands. It is near, but not in, the coastal zone. An environmental assessment is

required. The ESE report "discusses" the issues, but it does not analyze them. For traffic, they indicate there will be no affect. Topographical maps and site plans were not sufficient. There was no legal boundaries or topographic survey done. The regulations also require proof of applicable zoning approval. The only thing noted in the ESE application was that they had "talked" to Kent County and they had the approval--nothing more.

The witness testified that with regard to the Pine Tree Corners renewal application, DNREC made a point of noting that siting requirements had to be addressed (Hegman/DSWA Exhibit #21, page 3). This was a site that had been operating for ten years. In section 2(c) of DNREC's comments, they wanted a detailed description of the facility's training requirements. A waste screening process was also required in addition to a map of the location of all the fire extinguishers. The November 19, 2001 compliance report for the ESE facility (Hegman/DSWA Exhibit #25) indicates that there is no permit requirement for dust control and gravel was no longer covering the truck route to keep the dust down. Training was inadequate and inspections for prohibited materials were not being done at the weigh stations. The application said nothing regarding fire extinguishers, and ESE indicated it did not need a sprinkler system.

The witness further testified that there should have been a public hearing regarding the ESE application. There is no indication of what the tonnage for this facility would be in the public notice for the ESE facility (Hegman/DSWA Exhibit #26). They do not contend the notice was legally inadequate.

On cross-examination by ESE, Mr. Houska testified that his estimates of the traffic that could go in and out of the ESE facility is a total estimate--not just projected new traffic.

Ninety percent of the estimate is new traffic. The estimate is based upon each truck carrying four (4) tons. The witness does not know whether DNREC's questions regarding traffic were answered by ESE or not. ESE's application was double-sided while DSWA's was single sided. The hydrogeological report is 10 years old. The engineer who signed the report is a licensed engineer. DNREC may have had hydrogeological assessments for the ESE site already. He does not believe there was a topographical map. He asked to see the file on the site--old and new--and found none. He is not aware whether any were submitted by prior applicants. The concern is not whether DNREC had it or not, it is a requirement of the application. The question is whether DNREC has sufficient information to properly assess the request. The application here, however, did not state whether any of these items had been provided previously. DSWA has also been cited by DNREC for compliance violations.

On cross-examination by DNREC, Mr. Houska testified that he participated in the process of promulgating the DNREC solid waste regulations. He is familiar with the section that deals with modifications and the section that deals with renewals. One requires a "writing" while the other requires an "application". When seeking a modification, they also submit a "letter". There is no one person at the DSWA who looks at the legal notices. They admit they missed the notice in this case. The DSWA expected DNREC to tell them of the application in this case—it was a promise.

On re-direct examination, Mr. Houska testified that the ESE facility's application is for 200 trucks per day. In its application, ESE indicates there will be no increase in truck traffic due to the larger capacity of the trucks.

5) The Board considered the testimony of Mr. Joseph Paterno.

Mr. Paterno testified that he is employed by the DAFB for the civil engineering squadron. He is the community planner for the DAFB. This requires him to prepare the base comprehensive plan, noise abatement and safety plans, and provide intergovernmental cooperation (planning, encroachment, etc...). He also manages the airport obstruction program. He tries to discourage approval of development where the noise would impact on the residents.

The witness testified that ESE is outside the "clear" zone (1000 feet), but it is close to the runway protection zone. He was first informed that ESE was handling MSW by Mark Dunkle—an attorney--roughly one year ago. At the time he did not know where the facility was located. He did not see the notice. Normally when the DAFB finds out about encroachment, he works directly with Kent County. Kent County automatically sends copies of site plans, zoning applications, etc.... Had he been notified, he would have put together a team from DAFB with knowledge related to the potential impacts--including the BASH team, an explosive safety representative, attorneys, etc.... Kent County has been very supportive of the DAFB's concerns. Usually the DAFB gets notice from Kent County a month or more in advance. In this case he received the notice about a month or so before May 21, 2001. He contacted the DAFB attorney, and then sent an e-mail to Connie Holland. He had concerns that there were more issues than could be addressed in time for the May 21, 2001 meeting. The attorney handled it from there. The witness testified that they met with ESE through the safety office. He does not recall being contacted by either ESE or DNREC prior to the permit being issued.

On cross-examination by ESE, Mr. Paterno testified that he is responsible for knowing what is going on in the community involving DAFB. They do not have the same relationship with DNREC regarding notification as they have with Kent Co. He would not know about the DNREC permit. They have no one looking at that process.

6) The Board considered the testimony of Lt. Col. J. Blake Fentress.

The witness testified that he is employed by the DAFB as the Chief of Safety. He has been in the Air Force for 27 years. He has been a pilot for 19 years (including C-5's) and an instructor.

The witness testified that there are three safety units at DAFB—munitions, ground safety, and a flight division. In the latter area, he has experience with bird strikes. He has worked with Mr. LeBouef—the head of the BASH team. DAFB handles approx. 25% of all cargo out of the United States. There are thirty-six (36) C-5's permanently assigned to DAFB—each is about the size of a 747 and can have between 6 and 14 crew per plane. Last month, the base logged just under 2000 flight hours for the month and 350 hours of training.

The witness testified that the BASH program has been used at DAFB since the early 1980's. Of his \$120,000 budget, \$100,000 goes to the BASH program. There are migratory birds, small flocking birds (e.g. blackbirds), seagulls, and some birds of prey (vultures, raptors, etc...). They utilize "Border-Collie Limited" to harass the birds. They also use pyrotechnics, land and grass management.

With regard to the ESE facility, the witness testified that the primary runway 1-1-9

is almost 1200 feet from the ESE facility. He initially learned of the ESE facility from Joe Paterno. He was informed that the facility planned to handle MSW. Later he learned that they already were handling MSW. As a pilot, he knew there was a potential problem as trash facilities "so often...attract birds". He started observing the facility from across the fence and did some research. He also spoke with Mr. LeBoeuf (May of 2001). Concerns were raised and a recommendation to consult with the FAA was made.

The witness testified that he was given the numbers of Mr. Cimino and Mr. Cleary (June, 2001). He learned there could be a problem with a "partially enclosed facility". Mr. Cimino directed him to contact Mr. Cleary. It was another month before he spoke with Mr. Cleary (end of June, 2001). In the meantime he looked at the FAA circular. It indicated the facility should be at least 10,000 feet from the runway. The definitions were not clear as to what constituted a closed and partially enclosed facility.

The witness testified that in early June, he toured the ESE facility by invitation. It was a small transfer station with two large doors on one end (where trash comes in), and other doors on the side and back end. Two doors were open on the end, two on the side and one near the end. He could see the fence and runway from the facility. Inside there is a cement floor with MSW on the right side, and construction waste on the left side. An end loader moved it around inside the building. You could smell the odor, strongly, from 50-60 feet outside the building. None of the doors closed during their tour. The departing trucks they observed were not tarped.

The witness testified that it was his impression that the ESE facility was a partially enclosed facility. No one made any commitments as to how the doors would be operated.

In a letter dated May 31, 2001 (DAFB Exhibit #14) there is a representation that ESE would close the doors and make this a fully enclosed facility. For a period of time in June this was done. It lasted 7-10 days. Even with the doors closed, he did not feel this was a closed facility. After the visit, he asked Mr. LeBouef to view the facility. Mr. LeBouef agreed and wrote a memo to Colonel Gilbert, who in turn wrote to Constance Holland at the end of June, 2001. He then consulted with Mr. Cleary about what the FAA would do if it was an FAA approved airport. Mr. Cleary came out and viewed the facility.

The witness testified that he viewed the Atlantic County facility in early July, 2001. It was a much larger facility, much more enclosed, and over two miles away from the runway (he couldn't see the runway from the facility). The entry portals were about the same as the ESE facility. There were bird deterrents everywhere--wires and plastic strips at the doors, razor blades on the buildings and wires everywhere surrounding the buildings. There was a large air conditioning or ventilation system at the Atlantic City facility. For July, it was relatively comfortable inside. There was no such unit at the ESE facility. They were very bird conscious at the Atlantic City facility. The person he spoke with had a pyrotechnic device to be used if he spotted a bird. He had not needed to use one in a long time. All the trucks tarped at the exit portal before they drove off. The witness finally saw what constituted a closed facility. This facility was also at least 10 times larger than the ESE facility. The two facilities are close to each other in permitted limits--in fact, ESE may be larger.

The witness further testified that at various times planes are 600 feet above the ESE facility in circling maneuvers. Other branches of the armed forces also use the DAFB

facility for circling maneuvers. Air Force One uses the facility for practice. Circling is done on the non-Dover side for noise abatement and safety. Birds over and around the facility are a concern. There is a dumpster management plan that prohibits open dumpsters on the base. There are more restrictions on the time of day when migratory birds are in the area--mostly spring and fall. The tower has a bird watch program with varying levels of bird watch condition. If the condition is moderate, permission to land is required. If it is severe, planes must go to another base. They patrol fields within 2 miles from the base.

The witness testified that the TILCON ponds have also caused problems. In the last five years, as the ponds became huge, they have become a large bird attractant. They spend an inordinate amount of time at TILCON. In 1990 there was an agreement for TILCON to do bird abatement, but the company has not followed through. They spend the majority of their BASH money guarding the TILCON ponds. They would like to prevent another TILCON from occurring at ESE. There is a pattern of the birds "loafing" around the TILCON ponds during the day and then migrating back to the shoreline for the night. The concern is that they will begin loafing at ESE and delay their trip to the shore in the evening.

The witness testified that it takes only one bird to damage an aircraft. It takes only one bird to bring a plane down. In 2001, DAFB had 42 reported bird strikes. Once a bird is observed, there is a large chance you are going to suck one in. C-5's are large vacuum cleaners. When he has experienced bird strikes, he had to shut down engines and always landed to have personnel look at the plane. The witness reviewed a couple exhibits showing \$779,000 in damage caused by one seagull (DAFB Exhibits 18-19). Another

exhibit showed a raptor strike that caused over \$13,000 in damage (DAFB Exhibit #20). Both planes had to land. The C-5 had to shut the engine down. A typical C-5 can carry a maximum of 332,000 pounds of fuel. A typical flight to Spain carries between 200,000-250,000 pounds. Divide those amounts by 6.7 to convert to gallons. A C-5 carries 73 troops. Fuel is dumped in many situations if there is trouble right after take-off. The consequence is that the mission is likely delayed by at least 24 hours. If a C-5 were to crash in a local community, the results would be disastrous.

The witness testified that the ESE facility will, and is, attracting birds around DAFB. Planes will strike those birds at some point. At the end of May, 2002, he asked his people to observe the facility at ESE to seek if there have been any further changes. On June 13th and 14th, Sergeant May observed the facility and took photographs (DAFB Exhibits 24-36). Small birds are now attracted to the facility when it is quiet at the facility. They flew to the entry doors and perched on the bumper poles. The birds then flew into the facility to the MSW. This activity has occurred in just the last few weeks.

On cross examination by ESE, the witness testified that other than the recent photographs, he has not seen gatherings of birds prior to this past week. Three birds flying in is a "gathering". It is a new phenomenon. Small birds have been in the tree line surrounding the facility for "many, many years". He does not know why the birds are gathering. His assumption is that the birds have discovered the trash and that more birds will follow. The FAA circular was greyer than Mr. LeBoeuf's memo regarding the separation distances. It is the witness' understanding that a transfer station can be located within 10,000 feet of a runway under certain circumstances. The issue is whether it is a

closed facility or not. He understands there are facilities closer to airports than the one in Atlantic County. It is his understanding that the trucks are tarped as they leave the facility. He has not observed trucks untarp at the MSW side and dump. Otherwise, they are trash trucks. They retained Border Collie Limited about a year and a half ago. This added a resident area biologist, the dog and a handler. He cannot connect the seagull problem with the ESE facility. The State picks up road-kill carcasses on the roads surrounding the base. There is a landfill near the Atlantic County facility. The transfer station came first.

On examination by the Board, the witness testified that the ESE facility is not within the runway protection zone ("RPZ"). The DAFB did not receive notification of the expansion of the facility in accordance with the EPA requirement.

7) The Board considered the testimony of Mr. Edward Cleary.

Mr. Cleary testified that he has been employed by the FAA as the staff wildlife biologist since September, 1995. His field of expertise is the wildlife aircraft strike reduction program. They make the public aware of bird/aircraft strike dangers. They do remediation with airports reporting bird strikes. They do research on bird strikes, and they work with airplane manufacturers to improve aircraft parts to better survive bird strikes.

The witness testified that he has managed wildlife in relation to aircraft for many years and has dealt with this in relation to landfills. The issue of transfer stations is new. If a bird strikes an aircraft, it can crash and cause a loss of human life. In relation to altitude, the vast majority of strikes occur under 1000 feet. With regard to the FAA circular, the witness testified that there was a need for an external document. They began to

realize that there are facilities that attract hazardous wildlife other than landfills. Mr. LeBouef began drafting the circular (60% completed), and he finished it up. Studies were done in preparation of the circular. The Gabrey study showed that composting sites (grass, twigs, etc...) were within safety guidelines. The trash transfer station information from the Gabrey study was not used in formulating the circular. A fully enclosed transfer station would be compatible if no putrescible waste is stored outside. They envisioned a "fully enclosed" station to be one where the doors open, trucks enter, trash is dumped, and the trucks exit through another door which is then closed. There should be odor control, and a process to ensure there is no leachate or trash attached to the trucks as they leave the facility. At one time the Atlantic County facility would have been a fully enclosed station. The doors are now open all the time during business hours, and the plastic strips are not fully in place. They do not use the air conditioning system to control odor. Even if fully enclosed, such a station may not be compatible as sited. He would strongly recommend not siting such a facility within 5000 feet since mistakes can be made and no facility is perfect.

With regard to ESE, the witness testified that because of the gull problem with TILCON ponds, the hazardous species there, and the lack of bird movement studies, he would recommend that the facility be sited at least 10,000 feet away from the DAFB. The FAA would typically require a five mile radius study under these circumstances. A partially enclosed transfer station should not be within 10,000 feet of an airport. DAFB supports hazardous species: gulls, starlings (due to flocking), raptors and turkey vultures are in the area. No study has been done, but one does not need to be done as it is obvious that

these species pose a hazard in the area. There is a study that shows that starlings and gulls are attracted to facilities such as the one operated by ESE. The FAA has no jurisdiction over DAFB. Its circular, technically, does not apply. As the Air Force has no standards, they attempt to meet or exceed FAA standards.

The witness testified that he was contacted in late May or June of 2001 regarding the ESE facility. Based upon those inquiries, he drafted a letter and sent it to Mr. David Hugg outlining the FAA's definition of a fully enclosed transfer facility (DAFB Exhibit #37). At the time he wrote the letter, he did not know much about the ESE facility. He was subsequently contacted by Colonel Fentress for further clarification. In November 2001, he provide further guidance. By then he had seen pictures of the transfer station and discussed the matter with Mr. LeBouef and a local wildlife technician (Mr. Kevin Sullivan). He concluded that the ESE site was not a fully-enclosed transfer station and would not meet FAA standards (DAFB Exhibit #38). Even if it was a fully enclosed station, he would strongly recommend against it. It is simply putting it too close--"it is not safe."

The witness further testified that he observed the ESE site yesterday and in March of 2002. It is a large 75 x125 building with two large doors facing from the airbase side. Over the doors, one sign says C&D and another MSW. Both doors have been open whenever he observed them. There is damage to the third door around the side. On the left side is construction material and on the other side is MSW. MSW contains food--this is what attracts the birds. Yesterday he saw one starling looking interested in getting inside. Waste is visible from outside the facility. The waste discharge occurs 2/3rds to 3/4's of the way inside the building. At Atlantic County, the trucks are all the way inside the

building when waste is discharged. He observed no bird deterrents around the ESE facility. His observations did not change his opinion that the ESE facility is not a fully enclosed transfer station. It creates a BASH hazard.

The witness testified that the TILCON ponds also create a BASH hazard. The TILCON ponds could exacerbate the problem. The birds could begin moving between the two hazards and increasing the potential for a bird strike because they are moving across the runway. This creates a "serious potential" hazard. A five mile siting would be appropriate if there is a significant risk of bird movement in the flight path of the airport. He sees the same potential situation here.

On cross examination by ESE, the witness testified that tilled farmland would constitute a hazard. So would landfills and improperly handled trash receptacles at restaurants and fast food facilities. TILCON ponds do not necessarily pose a greater hazard than the ESE facility. Because of the potential for ESE attracting birds from the TILCON ponds, it is a hazard because of movement across the runways. If putrescible waste was in the waste stream over the past two years at ESE, the witness could offer no explanation as to why the gulls have not found the ESE site. It may be there is not enough food in the waste stream. He would have to know what is in the waste stream to form a better opinion. The goal here is aviation safety, and to keep birds away from airports. Even though two years have gone by, the risk still exists. Even if birds are not presently attracted to the site, that could change.

The witness further testified on cross examination that the Gabrey study did not form the basis for the circular. That study only included two transfer stations. He admits the

conclusion of the Gabrey study is that transfer station sites do not appear to pose a greater hazard to wildlife than an open field or vacant lot. He notes, however, that the study also notes there were "significantly more" birds at the trash-transfer site than the other control sites. This could possibly be due to a nearby drainage ditch as well.

On cross examination by Hegman/DSWA, Mr. Cleary testified that his opinions expressed at the March hearing before the DNREC Hearing Officer are the same. Letters written by Mr. Cimino prior to today's hearing were done without his concurrence. To the best of his knowledge, no one contacted the FAA regarding the siting of this facility.

On re-direct examination, the witness testified that gulls will normally feed a couple times a day—morning and then again in the evening. Gulls generally eat communally. His opinions given today are those of the FAA. The larger the waste stream, the greater the food, and the greater the risk if the waste stream increases in the future. Poor handling practices, including litter, can increase the risk. The USDA reports on bird counts is not the type of study the FAA would rely upon to assess risk. A once-per-month snapshot does not provide the type of data. There is no baseline study available.

8) The Board considered the testimony of Dr. Russell P. DeFusco.

Dr. DeFusco testified that he has a Ph.D. in Ecology. He has performed studies on BASH issues related to Air Force bases. He worked as the ecologist for the BASH team, and then the chief of the BASH team for a period of years. He has done modeling for the Air Force. As chief for the BASH team, he had worldwide responsibility for minimizing bird hazards at all air bases including habitat management, education, awareness, active

control (pyrotechnics, etc...), bird avoidance, the design of aircraft to better withstand strikes, and accident investigation over \$1 million.

The witness testified that he has made four visits to the vicinity of the DAFB and the ESE facility. The witness made a powerpoint presentation.

The presentation gave background information on the costs of bird strikes--nearly 3,000 strikes per year. Since 1985, 21 Air Force aircraft have been destroyed and 33 lives lost. The presentation showed various bird strike results. Even large aircraft are susceptible. Hazards increase due to increased populations of birds and the distribution of birds in the airspace. Known attractants near airfields can increase both. The separation distance standards are outlined in the FAA circular. Those standards are due to the distance required for an aircraft to reach an altitude of 500 feet (10,000 feet). The five statute miles provides a 2500 foot altitude. Fifty percent (50%) of all bird strikes occur below 500 feet. Ninety percent (90%) occur below 2500 feet. The EPA and the USDA standards mirror the FAA standards.

The witness testified that the DAFB has a long history of BASH problems. DAFB reported over 414 bird strikes since 1985. DAFB averaged 21.6 strikes per year between 1985 and 1999. There were 35 strikes in 2000 and 48 strikes in 2001. While this is statistically higher, the witness performed no analysis relative to the increased number of missions. These numbers include two (2) vulture strikes--the first ever recorded. This is significant because there are few such strikes where they typically occur. Both of these places are in Texas, and both facilities have landfills near the bases. Something has changed to bring the vultures into the DAFB area.

The witness did an on-sight assessment of the ESE facility last year in June. The facility lies within the main traffic pattern of the DAFB. No bird can ingress or egress the ESE facility without entering the DAFB traffic pattern. The ESE facility is partially enclosed. He saw a number of birds attracted to the site. He found photos on the web showing unenclosed transfer of waste. Birds will enter into a "partially enclosed facility". At the ESE facility, he observed un-contained trash along the roadways--including one bag of trash that fell off a truck. Turkey vultures attacked the bag of trash after soaring overhead for a period. Turkey vultures were attracted to the odors from the facility. He observed soaring birds over the facility--including turkey vultures. They may remain in the air a long time before determining if it is a legitimate food source. The USDA report on the facility cited feeding, loafing and towering. These indicate an attractant. Turkey vultures are the number one cause of lost aircraft--more than any other species. They also do not get out of the way of aircraft quickly enough.

The witness testified that mitigation measures are not always successful. This is due primarily to habituation. Birds learn quickly whether there is a real danger and they become accustomed to the techniques. Furthermore, all the birds need is intermittent reinforcement of the behavior (i.e., just occasional success in locating food at a site). Mitigation doesn't work once the birds are in the air. Dispersal also puts the birds back into the airspace and can increase the risk.

The witness testified that he expects the number of birds attracted to the ESE facility to increase. The facility is operating only at 1/10th of its permitted level. Already there are spillage and failures. DNREC has cited the facility. This is a bad precedent as there will

be failures with the increased volume moving through the facility that will attract birds.

The witness further testified that Transport Canada is the Canadian equivalent of the FAA. According to one Transport Canada publication, waste transfer stations are one type of facility deemed incompatible with aircraft operation (Hegman/DSWA Exhibit 31). In another Transport Canada Report (Pickering Airport Lands Avifauna Study) produced to assist in zoning lands surrounding the airport, the authors found that the primary bird hazard zone should be 15 kilometers from the airport--approximately 9 miles (Hegman/DSWA Exhibit 33). The same report indicates that extremely hazardous land uses should include waste transfer stations. In another study on Pickering Airport lands, the authors identify transfer stations as regular feeding locations for gulls (Hegman/DSWA Exhibit 32).

The witness next testified regarding one of Dr. Rolph Davis' studies entitled "The Use of Night Landfilling to Reduce Bird Hazards to Aircraft Safety" ((Hegman/DSWA Exhibit 35). This study involved research done at the Atlantic County site. As that site was being proposed, the facility was opposed by an number of agencies because it was 10,300 feet from the main runway. In Dr. Davis' study, he reported gulls present during four (4) occasions at the covered MSW disposal area during 249 days where surveys were conducted. This conclusion is not supported by the data in the study. There were 312 days where pyrotechnics were fired by equipment operators. On 248 days there were control events where pyrotechnics were utilized. This was a clever way bifurcate the data. Added together they amount to 2,739 shots fired at 10,000 gulls--not quite the four (4) reported. This consequence of this report was that the amount of MSW processed at this

site was increased from 100 tons per day to 1,850 tons per day.

The witness further testified about several factual errors in a follow up report by Dr. Davis at this same site (Hegman/DSWA Exhibit 34). The witness was concerned with the techniques used during the study. They would disburse the gulls and then count them. This would result in artificially low numbers. He also noted that the dispersal techniques were done by 4 teams and the results were never summarized in one table. By the witness' calculations, there were 707,003 pyrotechnic shots fired at over 29,000 gulls during these studies. The witness was further troubled by the use of pyrotechnics early in the morning prior to the surveys being conducted. By his review of the report, the witness calculated that over 1,500 shots had been fired at over 10,000 gulls before the counts even began. This was an experiment to show bird mitigation controls could work at this site: it was supposed to be a model. There is a continuous effort to control the birds at this site. Furthermore, there is now greatly increased filling during the day.

With regard to the transfer station portion of Dr. Davis' report, the witness testified that there were 6,026 birds observed in 545 of 1466 surveys. Birds were observed at the transfer station over 37% of the time.

In another bird survey conducted at the Atlantic County site by the USDA, the observer spent ten hours over a three month period at the site (Hegman/DSWA Exhibit 36). He observed gulls in 50% of the surveys. This is in comparison to the 15.5% reported by Dr. Davis.

In reference to the Gabrey Study's conclusion (Hegman/DSWA Exhibit 37) that the "sites" (collectively) did not attract birds at higher than background levels, the witness found

it to be "just incorrect". The term "significantly" noted by Mr. Cleary is backed up in table 4 as statistically significant. The transfer station did attract birds at higher than the background levels. A greater concern is that this study cannot be extrapolated to Dover—using just two facilities in north Ohio.

With regard to the bird studies conducted by USDA at the ESE site (Hegman/DSWA Exhibit 38), the witness testified that while they constitute a snapshot in time, they are consistent with an attraction to the site. The surveys were not comprehensive (just three months), and a minimum of a year is needed to get the annual cycle of bird behavior in the area. The fact that none of the birds landed on the facility does not mean they were not attracted to it.

In summary it is the witness' opinion that the "facility is just entirely too close to the DAFB main runway." The potential hazard caused by an increased bird presence within the traffic patterns is an unacceptable risk.

On cross examination by ESE, Dr. DeFusco testified that gulls are one of the species causing concern with bird strikes. They are one of the three major species of concern. He has not seen gulls feeding at the transfer station. He does not know of anyone else who has testified to that effect. He has seen gulls loafing at TILCON ponds. He noted in his report a small number of gulls circling above the site. He feels they are attracted to the site. He does not disagree that the gulls would feed at the Sandtown landfill. He agrees that efforts should be made to reduce birds at all attractants near the DAFB.

With regard to turkey vultures, Dr. DeFusco testified that he would not find it unusual

for turkey vultures to be attracted to the facility even if there were no MSW there at the time. They can be attracted to the remnant odors. He observed three turkey vultures on the 8th of June, 2001. This was in relation to the bag of trash that fell off an inbound truck. In March, 2002, he saw a group of five turkey vultures in relation to another bag of trash. He did not take pictures of the birds feeding on those days.

With regard to the bird counts taken by the USDA, the witness testified that he is not sure what the USDA meant by "adjacent" to the ESE property. Turkey vultures follow the odor stream, and that is consistent to the facility being an attractant. He cannot "prove" that the vultures are attracted to the facility: he cannot disprove it either. A hooded merganser does not feed on MSW. A blue heron might feed at a landfill, but he is not sure if it would feed on MSW or rodents at the site.

With regard to the South Dade facility, the witness testified that birds will go into a building--under a roof--to feed. Birds do not distinguish between an open side of a building and doors. With regard to the Anchorage transfer station the witness testified that it has doors like the ESE facility. During operation, the doors are open.

9) The Board considered the testimony of Dr. William Southern.

Dr. Southern testified that he is employed by WES Ecological Consulting. It is his company, and they deal with the bird strike/ aircraft issue. They primarily work for landfill companies and train personnel how to deal with the issue. He has a Ph.D. in comparative animal behavior, ecology and wildlife management.

The witness testified that he is familiar with the ESE facility. After speaking with Mr.

Youchak he was retained by ESE. He visited it in April, 2002, yesterday and today. He inspected the area around the facility. Typically, he selects a 15 mile radius and monitors bird populations on a periodic basis--over a years time. In this case, the subunits were the ESE facility and the DAFB--this included the golf course. He also viewed Bombay Hook and the Sandtown landfill facility. He had been furnished bird counts from the USDA which are one of the bases for his opinions. In that report, there is no indication that the birds were feeding on the waste stream. The report refers to them as just "feeding". The aquatic bird listed as "feeding" does not feed on putrescible waste. Also an unidentified sparrow is likely feeding around the facility and not "in" the facility. This type of bird usually feeds on seeds, etc... The same applies for the aquatic birds--they are feeding in their natural habitats--not the ESE facility. There is no evidence that gulls are attracted to this facility. In his opinion he feels it is "highly unlikely" the gulls will start feeding at this site "in the near future". These gulls are experienced landfill feeders. They go from the TILCON ponds to the Sandtown landfill in the west. If they had wanted to feed at ESE, they would have done so by now. As experienced birds, they would be looking for new landfills. If they see the trucks, and refuse around, then one would expect them to be attracted to it. They are not getting those cues. He also observed on one occasion gulls at the golf course. This followed a rain storm--typical behavior--where short grass would force worms to the surface following a rain.

With regard to turkey vultures, they will eat putrescible waste. There is no evidence they are attracted to the ESE facility. They have flown over the site, but there is no evidence that they are attracted to this site. They are in transit. The birds in the photos

are nesting and living on the site. He has not noticed any circling behavior. Turkey vultures are scattered all over the area. Their food sources are widely scattered. Odors are detectible on the site. If unable to get at the waste, a turkey vulture will move on, but there is a chance they will circle for a while. With the roof, they learn they will not get ready access to the food and will move on. Paper and dry waste on the side of the road do not attract birds. Birds cue in on known food sources.

With regard to the DAFB exhibits (photographs), Dr. Southern testified that the bird in one of the photographs (DAFB Exhibit #27) is a house sparrow which does not feed on putrescible waste. It is probably just picking up grit or seeds blown at the site. It is nesting at one of the buildings, but it is not feeding. The bird in another photograph (DAFB Exhibit #28) is possibly a common grackle. It will feed on putrescible waste, but it is unlikely to forage in numbers in a facility such as this. This is a dark building and birds are hesitant to go into places with dim light. Any such activity likely occurred during a quiet time, and it is not likely a first time event. Birds will be curious to check out interior spaces. The bird in DAFB Exhibit #29 is a grey catbird that does not feed on refuse. It nests on the perimeter of the base. As it is a territorial bird, this will limit other catbirds at the site. The information does not change the conclusions of his report.

With regard to the DAFB bird strike data, the witness testified that he disagrees with the prior testimony that 75% of the bird strikes were small birds. It is 45% according to his calculations. In order to get it up to 75% one would have to include waterfowl and raptors. That would leave gulls and vultures. Waterfowl constitute 26% of the strikes. This shows a fairly good bird control program. The bulk of the strikes by small birds must be occurring

on the base given the low altitudes in which they fly. This is related to the base habitats-- grass, trees, shrubs, etc....

With regard to his own report, Dr. Southern testified that DAFB has a bird problem due to its location near water habitat and the habitats on the base. This includes the migratory birds and the farm fields surrounding the base. The large numbers are probably due to snow geese. There is no indication there is any bird control program at TILCON ponds. Birds flying over the ESE facility are essentially a random event at this time.

On cross examination by Hegman/DSWA, Dr. Southern testified that this facility should not be a concern in the future. It depends upon the assumption that the facility is well-managed. If not, then it might attract a few birds. He does not see it being a large attractant. This is due to the size of the parcel. There might be a few gulls, but not more than the baseline flying over the base currently. In his experience, transfer stations such as this do not attract birds. He does not know why Transport Canada recommends transfer stations as not being a compatible use. The FAA circular is the industry standard-- "it is forced upon the business...." He has not worked on a transfer station located within 1500 feet of a runway. If it were a closed facility this close to a runway and well operated, he could recommend it "if no other options...."

On further cross examination by Hegman/DSWA, the witness testified that he was involved in the Jefferson County, Pennsylvania case. In that case, he testified that even a landfill would not attract more than a baseline number of birds. This was based upon a bird control system. The USDA survey at the ESE facility was done once per month for just a few minutes. There was only three months worth of data at the time he gave his

report--2 more since then. He is not drawing his conclusions solely based upon the USDA study. It is just another data source to support his conclusion. He would not have designed it the way it was done. He would not have totaled the number of birds. Some sightings could have been the same bird. A year long study is not necessary in this case. Everyone knows there are lots of birds in the area. That is not the issue. It is a matter of drawing a conclusion as to whether the site is an attractant. For a new landfill, it would be a year long study, with monthly visits spending a period of days in each month. A single site visit was adequate in this case. He does not know what the tonnage was during the period he did his observations. The tenfold increase by 2004 does not disturb him. The amount of food does not change. The amount on the face of the pile is the same. It does not accumulate since it is continually going out of the facility. The odors are going to depend on the material, and given the size of the facility, the turnover is going to be the same.

On cross-examination by the DAFB, Dr. Southern testified that hazardous wildlife surrounds the ESE facility. Hazardous wildlife occurs everywhere. You cannot put a landfill or transfer station anywhere where there will not be hazardous wildlife. With regard to the FAA circular, the witness testified that he agrees with the 10,000 feet separation standard assuming Mr. Cleary's interpretation of the FAA guidelines. It would not be his first choice to site a transfer station this close to the airbase. He would be concerned if it were a landfill. He does not view this as a concern because this is a "closed" facility. He views this as a closed facility. He does not read the document as Mr. Cleary does. The witness was not involved in the development of the circular and determining what is a

closed facility. This facility can co-exist with the DAFB operations depending upon whether it is operated properly. Employees would have to be appropriately trained. They would have to be complying with their permit, exercising proper oversight by management, and maintaining records required by Delaware regulations. He is not aware whether they have operated improperly within the last two years. It is not his concern to investigate these internal operational issues. If there were "major" deposits of waste stored outside, that would be a concern.

With regard to the reports he authored (March 12, 2002 and May 27, 2002(Hegman/DSWA Exhibit #39)), the witness agreed it was possible that starlings, sparrows, etc... might nest in the facility, but he deemed it "unlikely". They are nesting on the outside of the building--under the eaves. He did note it was "highly unlikely" that birds would enter the facility to feed. It is the term "feed" he has a problem with. At least two of the species were not feeding. The grackle might. It is possible they might enter the facility. Does not mean they will continue to do it.

On re-direct examination, the witness testified that it is most important how the waste materials are handled.

10) The Board considered the testimony of Dr. Nicholas Carter.

Dr. Carter testified that he is the executive director of Border Collie Rescue. Part of their mission is to train dogs to harass birds off airport runways. He has a Ph.D. in zoology and a law degree. His focus is on animal behavior and wildlife management.

Part of his operation involves determining why the animals are there, and then to

detract them. His operation began 10 to 12 years ago to frighten Canadian geese from golf courses. About five years ago, they started the border collie training for airports. They have dogs at commercial airports and military bases in the U.S., Canada and Israel. Over the past few years he has published articles and presented at bird strike conferences.

The witness testified that he was at the DAFB for the first eight to nine months. Thereafter, he hired another individual to do the control portion. In December of 2001, there was a change in personnel, so he had to cover for approximately two months. Fifty percent of what they do is actively chasing birds off, and the other half involves habitat management, flight operation changes, and off-site (farms) management. The principle technique is the use of the border collies--putting a predator on the grounds. The birds no longer want to hang out there any longer. They also use pyrotechnics, but it is limited. It is not always effective as it is just noise--like the planes. The border collies are more effective. They also use remote-controlled airplanes. They pick up carcasses of animals. They do some trapping, but they are moving more to bird control. They operate in a radius of four kilometers outside the base--an area of 50 kilometers. They operate five days a week. One person covers the entire area. ESE is part of the patrol area. This is a limitation on the effectiveness of the program, but it is better than what DAFB had in the past.

With regard to TILCON ponds the witness testified that they are there every day. They are spending more time there now to distract gulls. They utilize a boat to scare the Canadian geese. TILCON has not done much to assist in wildlife control. The problem with TILCON is its location: on the other side of the Delaware Bay. The birds like to loaf

at TILCON. Behind TILCON is another wildlife refuge. They can almost time it to the hour when the birds move back and forth. The problem with ESE is that it is a food source. They worry about someone leaving a small dumpster open with a bag lunch in it or a bag of dumped popcorn. ESE has a lot more trash.

The witness testified that they do not focus on ESE. They are more concerned with larger issues such as migrating birds in the fall and spring, and the gulls at TILCON during the summer and winter. They have problems with turkey vultures using the thermals over the runways to gain altitude. They started seeing turkey vultures over a certain area since the summer of 2000. The area they were in did not make sense to him. It was east of the runways over a tree line. They were also not over fields--the usual feeding areas. Initially they thought it was a dead animal, but they found none. He later learned it was ESE. He also later learned it was handling putrescible waste. Prior to the summer of 2000 the turkey vultures were over the air field. The behavior has continued until today. On June 30, 2000, there was a bird strike with a turkey vulture. This was on the north side of the runway diagonally across from the ESE facility. He does not believe the bird actually struck the plane due to the lack of damage. It is his guess that the bird was killed in the jet wash and broke its neck when it tumbled to the ground. To get thrown downward, it would have had to pass through the jet wash. Finding it on the north side would suggest it was coming from the south side--the ESE side. As the smell increases the ESE facility will attract more turkey vultures. This will occur even if they cannot land and feed. At present, they are not landing and perching on the building. Right now, it is more of a concern as the birds are flying and not on the ground. Currently, the seagulls are not a

problem because of the size of the ESE waste stream. This can change with the increase in handling at the facility. Mitigation is unlikely. The collies won't work because the birds would just move to the trees. Pyrotechnics won't work since the site is too close to flammable objects. All that is left is the remote controlled airplane.

On cross examination by ESE, Dr. Carter testified that his contract started in February, 2000--not before. Every day during the summer and winter (when he is not focused on the migratory geese populations) he sees between 2 and 10 turkey vultures over the facility. The vultures' favorite places to fly are the trees above and below ESE and a set of trees on the other side of the runway. They looked for nests but have not seen any. They vultures also do not nest or roost in densely wooded areas. He cannot say for sure that it is ESE that is attracting the vultures, however, it is a reasonable explanation for the behavior. He started seeing the pattern in June of 2000. He has not seen any change between 2000 and 2002. He does not know if there was a pattern prior to this time. He does not see seagulls at the facility. He is concerned about it becoming a problem. Gulls hunt by sight and smell--primarily sight--but if large enough, smell becomes a concern. Gulls are smart, and they can distinguish between types of vehicles.

On cross-examination by DNREC, the witness testified that the golf course is a concern for the Canada geese but not other bird populations.

On cross-examination by Hegman/DSWA, the witness testified that it is plausible the birds could be along the trees near where trash is on the road leading to ESE.

11) The Board considered the testimony of Dr. Rolph Davis.

Dr. Davis testified that he is employed by LGL Limited—an ecological research and consulting company. He has been the President and CEO since 1979. He holds a Ph.D. in aviary ecology.

The witness testified that he has developed an expertise in bird hazards related to airports. He has worked on a variety of airport/wildlife/waste handling facilities situations. One of his major clients is Transport Canada--the Canadian equivalent to the FAA. He is on a permanent retainer for the Canadian Department of Defense to consult with the Canadian Air Force. Over the years he has done studies on bird deterrent techniques. They have developed such techniques. He has been involved with the Atlantic County facility and designed the bird deterrent program there. Most of the studies were conducted over one year in duration. He participated in 29 of those studies. He has particular experience with gulls. He has worked with approximately 30 transfer stations. One was a three year monitoring program at a wet/dry waste facility.

The witness testified that he first inspected the ESE facility in March of 2002. He was also there in late April and late May. He saw Dr. DeFusco's photographs regarding the Anchorage and Dade County facilities. He is familiar with the Anchorage facility as it is just a few blocks from their Anchorage office. The facility has two entrances. What is not shown in the photograph is the other side of the building which is also open while in operation. In addition, ravens are a northern species and are not found in Delaware. They habituate well to human activity.

In regard to Dr. DeFusco's criticism of his work, the witness testified that Dr.

DeFusco misinterpreted some of the work he had done. There also were some misrepresentations. With regard to the report entitled "Sharing the Skies" (Hegman/DSWA Exhibit #31) and Table 8.4 therein, the witness testified that this is a guide aimed for pilots and not Transport Canada's policy with regard to waste transfer stations. The official statement of Transport Canada does not mention transfer stations--just landfills and other open waste sites. With regard to the Pickering Airport study (Hegman/DSWA Exhibit #33), the witness testified that Transport Canada rejected that report and hired his firm to re-do the zoning portion. Related to the Atlantic County facility studies, Dr. Davis testified that the "escalation" at the Atlantic County site had been approved all along by the relevant government agencies--including the FAA. Referencing the Night Landfilling report (Hegman/DSWA Exhibit #35), the witness testified that this is a 350 acre site--with a composting site, a transfer station, and a landfill. The experiment was to determine if the gulls came to the site at night (which they did not). The second issue was whether they would feed on the covered waste from the night before. There was a 1/2 acre study site. That is the reference to the four (4) gulls. The other tables reference the overall site. They kept track of all the pyrotechnic shots fired to see if the birds were beginning to habituate to the use of pyrotechnics. They offered two tables to assist the committee in determining where possible program problems existed. They did summarize all the data on page 10--under Table 5--"Combined Control Efforts" (Hegman/DSWA Exhibit #34). With regard to the early morning bird dispersal efforts, the witness testified that this is a bird control program. The objective is to keep the birds away from the site. The Atlantic County site is only one example--it is a control site--unlike ESE which has no controls and does not

need any.

The witness testified that there are four issues to look at when considering the ESE facility. First, is the facility attracting birds at present and in the past. Second, will it do so in the future. Third, what are the regulatory factors. Finally, putting it all together, will the ESE facility create a hazard in the future.

The witness testified that the ESE has not yet attracted any birds or hazardous species. As to the vulture activity, the witness testified there may be a night roost in the trees. The dog handlers do not work at night to see if they are going into the trees. Pyrotechnics would be sufficient to scare away the turkey vultures as they are shy of human activity. With regard to the birds witnessed in the transfer station, the witness testified that there are two nesting catbirds near the transfer station. Grackles typically do not feed on MSW. As to gulls, they are just flying over. As long as the waste remains in the building, the gulls should not become a problem. Odors are detectable at both the ESE and Atlantic County sites, and there is no evidence that they tower over either site. Turkey vultures exist in Delaware at an average of two birds per square mile and travel extensively. It is not surprising that they are in the area and fly over both the ESE site and the airfield. Dr. Davis explained the increase in the bird strike statistics is due to the on-site bird deterrent people. There is more accurate reporting. That factor can be screened out if one looks at "serious" strikes--involving a cost of over \$10,000 (ESE Exhibit #6).

As to whether the facility is "closed" or not, the witness testified that the 1997 FAA circular indicated some uses that were allowed. Contrary to Mr. Cleary's representations, it is his opinion that the Gabrey study did play a role. The changes made in 1997 that

permit the use of certain transfer stations were the results of the studies. The FAA standards were reduced, and the only reason for doing so would be the result of some studies--including the Gabrey study. This is his supposition. With regard to Dr. DeFusco's conclusions that the data does not support the conclusions in the Gabrey study, Dr. Davis does not agree. One must look at the biology--the location of a wetlands area next to the facility.

The witness testified that the FAA circular is not binding. The wording is very carefully crafted. The use is not incompatible provided there is "no apparent attraction to hazardous wildlife." The key language in section 3-2 is "accessible to hazardous wildlife". Furthermore, the EPA regulations (legally binding) require the FAA standards with regard to a landfill. If a landfill can meet these requirements, then a transfer station should be able to do so. The landfill must prove it does not pose a bird hazard to aircraft. The witness described two existing large transfer stations near airports--therefore, this case is not a precedent.

The witness testified, in concluding, that this site has been in existence for two years. It is not attracting gulls, and it is not attracting vultures. The food is not accessible. If there is more waste, the odor will go down because it won't sit for long. As long as it operates as it has been with the MSW inside, then there should be no problems.

On cross-examination by Hegman/DSWA, Dr. Davis testified that the Sandtown landfill is 15 miles west of the DAFB. There are no airfields within 5 miles of the Sandtown landfill. None of the studies he performed involved a transfer station without a landfill. The two years of data regarding the ESE facility is by ESE personnel observations--it is not

scientific. He assumed that because the permit did not issue until July, 2000, then there must be another reason for the existence of vultures in the area in June of 2000. The tonnage reports show municipal waste in June, 2000 and also in prior months (Hegman/DSWA Exhibit #44). Dr. DeFusco's observations indicate that vultures are feeding on trash--not attracted to the facility. The food is on the side of the road and available--it is not available at the facility. If trash is on the side of the road, it will attract birds. With regard to the odor issue ("...it won't necessarily involve more"), it is a common sense observation that the waste will be moved through the facility at a faster rate. He has done no studies to establish this as fact. When he was at the ESE facility, there was some commingling of the waste, so he could not determine how much of it was MSW.

On further cross-examination by Hegman/DSWA, the witness testified that he was not involved in the drafting of the circular. Mr. Cleary was involved. The final document was not solely Mr. Cleary's work: there were years of work and several reiterations of the document. The witness' distinction between a partially and fully enclosed facility is that a fully enclosed facility can be within the FAA setbacks--a partially enclosed facility cannot. His distinction further depends upon how the animals respond to the facility. Accessible is based upon how the birds react. The pictures of the catbird and the common grackle in the facility show birds nesting in the area and not birds coming from another area. Therefore, accessibility to feed is the criteria. Also it depends upon how well managed is the facility. He has heard of allegations of permit violations. He has not heard of waste outside the facility. It is a very clean site, and has been since he first saw it. If people are concerned, there should be a permit condition outlining site clean up. He would agree the

FAA circular is a siting/planning tool. The main relevance of Atlantic County is the towering behavior of the birds. There is no evidence from the studies that the birds are trying to get into the Atlantic County facility. There are better ways to handle mitigation at the ESE site than pyrotechnics. Habitat control is the best means of control. He opposed the location of a transfer station near the Logan Airport. He has recommended that a transfer station be located as close to a runway as the ESE facility in Duquesne—about 1500 feet from the runway end.

On cross-examination by DAFB, Dr. Davis testified that the Duquesne facility is not a military airfield. The Duquesne facility processes about 1,800 tons/day. He recommended mitigation at this facility—including patrols of the site, and regular clean-up several (every two hours and at the end of the day) times per day. The site is about the same as the ESE facility. Waste falling off trucks is a legitimate concern. He has not been back to the Duquesne facility. The 10,000 feet requirement would apply to the Atlantic County site. Most of the site is beyond that distance. The oversight committee was set up in the Fall of 1997 when the landfill request was made. It is helpful to have the neighbors involved in the oversight process—they have a vested interest. He would agree that DAFB has a serious hazardous wildlife problem.

The witness testified that the EPA regulations address landfills and do not directly apply to the ESE facility. The FAA circular places the burden on the developer to establish he is not handling putrescible waste unless he is a transfer station. The Atlantic County facility is approximately seven (7) times the size of ESE facility. Up to now there were no mitigation measures needed as it was not a bird attractant. In his experience, the side

doors of the ESE facility are usually closed, but in DAFB Exhibit #8, all the doors are open. With the level of activity in the picture, there will not be any gulls or vultures. If they were to habituate, they "might" investigate provided they are already there on the ground. The building is not such that gulls would fly into it. Other small birds would go in just like any barn or other building. In all cases he has observed MSW trailers tarped. It is all right to store such MSW outside in a trailer for a few hours provided it is properly tarped.

12) The Board considered the testimony of Mr. Michael Youchak, P.E.

Mr. Youchak testified that he is the vice-president of Youchak & Youchak—an engineering consulting firm. He has been retained in this matter by ESE. He has experience in the siting and design of transfer stations. He has 12 years of solid waste experience. He has worked on five transfer stations.

The witness testified the ESE is an "enclosed" facility. The witness testified that he did not have to get formal approval from the FAA regarding the siting of either the Seneca and Tri-county transfer station facilities. He worked on the original permit applications in 1990, and the more recent, 2002, renewals. Recently, the FAA reviewed the facilities and they agreed that the facilities were enclosed and did not need approval. One of the individuals was Vincent Cimino. The Tri-County facility is a 100' x 120' metal building. It is 6800 feet directly east of the Grove City airport--directly underneath the flight path. The Seneca facility building is also 100' x 120'. It is a similar design to Tri-County. Both facilities have doors that are open during the hours of operation.

With regard to the ESE site, Mr. Youchak testified that he obtained a letter from Mr.

Cimino (ESE Exhibit #16) in which Mr. Cimino states his opinion that the ESE facility is a "fully enclosed" building. The witness also made some inquiries about the Dade County facility. People in his Palm Beach office visited the site and took photographs. They show the openness of the facility. He would define it as an open facility.

On cross examination by Hegman/DSWA, Mr. Youchak testified that the plastic strips and the closed doors are not required by the FAA since there is no need for bird deterrents. Furthermore, the separation distances did not need to be followed as they are a fully enclosed facility.

On cross-examination by DAFB, Mr. Youchak testified that he did not do any of the siting work for ESE. He believes an enclosed facility is four walls and a roof. He considers Dade County to be either "partially enclosed" or "open"—it is a grey area. At the Tri-county facility, the aircraft flight path is 1,570 feet above the facility. At Seneca, there was no background wildlife study done. Dr. Southern visited Seneca and did a one year study at Tri-county. He is aware of the FAA circular. He is not aware that Mr. Cimino expressed an opinion that no facility should be located within 1500 feet of a runway. The Cimino letter was not the first draft of the letter. Initially Mr. Cimino wanted strips all the way down to the ground. The witness asked that to be changed due to the way operations were done at Atlantic County. The witness is aware of the conflict between Mr. Cimino and the FAA's position. It is Mr. Cimino's responsibility to issue permits and to determine if land uses are appropriate. Mr. Cimino has not provided any additional letters. The witness has not asked for Mr. Cleary's opinion.

On cross-examination by DNREC, the witness testified that the FAA "discourages"

development of solid waste facilities near airports. Their disagreement with a siting decision constitutes a letter of advice and is not binding.

On questions by the Board, the witness testified that he was aware of the conflict with Mr. Cleary and Mr. Cimino in March of 2002 when he received Mr. Cimino's letter. It is the witness' understanding that both Mr. Cleary and Mr. Cimino drafted the first letter sometime in 2001 (DAFB Exhibit #37). The first draft of the March 13th letter bears the same date and the only difference is the height of the vertical strips.

13) The Board considered the testimony of Mr. Marc Shaener.

Mr. Shaener testified that he is the vice-president of ESE. He is responsible for the overall day to day operations of the facility.

The witness testified that he received a copy of a letter to DNREC from Constance Holland. The second week of July, 2000 he received a telephone call from DNREC inquiring if there were any known problems with the zoning. He called Ms. Holland and spoke with her about two days later. Bart Begley was also on the line. The letter came as a surprise. From the beginning, there was a meeting with Kent County (he was not present) the result of which was that there would be no problem with the zoning provided that the footprint of the building remained the same. When he spoke with Ms. Holland, she told him of the zoning history of the site. She told him that "you guys did everything right" and that Kelly Crumpley made some mistakes, but his supervisor was not there at the time. She suggested they apply for a conditional use. As a result, she waived all the fees for the application. He disagrees with the affidavit of Ms. Holland. She told him that Kelly

Crumpley had made a mistake in his review. Bart Begley is very thorough, and given the representations made by Bart, he finds it difficult to believe Ms. Holland's representations in her affidavit.

The witness prepared a videotape. He shot hours of footage. The tape comprises only 20 minutes. It is not offered to show there are no birds. It is offered to assist the Board in familiarizing them with the facility. He started videotaping at the end of November 2001 until March, 2002. The video also showed footage of the surrounding areas, Bergold Farm, TILCON ponds, the golf course, and a building in Little Creek.

The witness testified that the picture in DAFB Exhibit #13 is an incoming load of construction debris. It is not one of their trucks as it does not have their number on the side. The trucks come in to the facility, are inspected, and MSW is directed to the right and construction waste to the left. Sometimes the doors are switched depending upon traffic, but the waste is distributed appropriately. Someone has the sole responsibility to police the area for trash--in the yard and along Postles Corner Road. If they see debris on Route 9, they take care of that. The trucks that haul MSW are typically rear loaders. They are sealed. The other type is an open top truck--tarp--which is inspected. The unloaded waste is loaded on to a larger truck and tarped inside the building. It is then hauled out of state.

The witness testified that they are operating a transfer station because they provide competition. The added transportation costs are worth the investment because the disposal costs are so much less. The modified permit was issued July 3, 2000. As to the weekly tonnage reports (Hegman/DSWA Exhibit #44), the witness testified that they were

processing some MSW with their own trucks at the DSWA beginning November, 1999. None of that waste was every brought back to the ESE facility. Some minimal tonnage was being accepted during the middle of July, 2000. The larger loads began in August, 2000. The witness also disagreed with Mr. Houska's estimates of future truck traffic at the ESE facility. The average tons per truck is low for both incoming and outgoing. Trucks bring in an average 10-12 tons per load. Outbound trucks average 21.5 tons per load. The witness' calculations would be 172 truck trips per day--less than half of Mr. Houska's estimate.

The witness testified that he sent numerous letters to the DAFB to work with them on this issue. He requested counsel to work with the base to do joint bird counts, mitigating measures, and hold regular meetings. He has never seen a bird feeding on MSW at his facility.

On cross examination by the DAFB, Mr. Shaener testified that his company was willing to work with the base after the base found out about the processing of MSW. He never contacted the base prior to the permit being issued. He admits that MSW that attracts birds is a safety issue. The prior commander refused to meet with them to attempt to mitigate the risk. The DAFB has no problem with handling any form of dry waste. He was aware that the prior facility they purchased was excluded from processing MSW by DNREC. The zoning regulations did not distinguish between MSW and dry waste. He recalls the May 31, 2001 letter indicating they would close the doors while the facility was in operation (DAFB Exhibit #14). Colonel Gilbert, or his representative, refused the offer and indicated they would rather not have them handling MSW at all. In the letter, he

indicated he would change it from a partially enclosed to a totally enclosed facility. He confirmed that by closing the doors the DAFB would consider the facility to be closed. At the time, the FAA guidelines came up. They indicated they would do what was practical. That was the intent of the letter. The waste is not commingled in the building. There is some minimal spill-over in the building. It is commingled in the outgoing trucks. Trucks will lift up and dump the load and begin to pull out after dumping the load--this explains the pictures presented by the DAFB.

The witness testified that he did not contact the FAA regarding the permit modification. He learned this from his prior experience and from working with DNREC. He is aware that DAFB sponsors a civilian air operation as well. He could not recall if he was aware of it at the time he filed for the permit modification.

The witness further testified that there is three times as much MSW to process as there is construction waste, and, therefore there is a bigger market. They recover some of the recyclable waste from the waste stream--approximately 5%.

On cross-examination by DNREC, the witness testified that the permit requires them to keep the site clean.

On re-direct examination, Mr. Shaener testified that the landfill they transport to is in Virginia, and they accept both kinds of waste.

14) The Board considered the testimony of Mr. John Paradee, Esquire.

Mr. Paradee testified that he is an attorney. He provided services to the Kent County Levy Court until January, 1999, and he has provided legal representation to ESE.

Mr. Paradee testified that he spoke with Ms. Holland regarding the zoning for the ESE site. The first contact occurred on July 17, 2000. Ms. Holland told him that an employee in the County Planning Department (Kelly Crumpley) had told ESE the zoning did not need to be changed. She indicated he had made a mistake and had admitted that to her. She told him that ESE had "done everything right". She suggested that ESE apply for a conditional use permit and offered to waive the fees--likely because they had made a mistake. In her affidavit, she conceded that Kelly Crumpley made a mistake but stated it was due to the fact that Kelly was not given all the information and was not aware of the history of the zoning for the property. That is not his recollection. It was his understanding that ESE had told Mr. Crumpley that the facility would be processing MSW. They talked about what brought this to her attention. She indicated that Mike Parkowski and Mark Dunkle had contacted her and indicated that the property was not properly zoned and asked her to investigate.

Mr. Paradee further testified that he has represented commercial developers who must seek approvals from government agencies. It is his understanding of the Kent County Department of Planning's position today regarding all inquiries of zoning status that they respond in writing. He believes this is a response to this case and was effective August, 2001. This occurred after ESE withdrew its application for conditional use. The present Kent County Planning Director--Reed McMillan--changed this. Prior to this time, the practice had been to give a verbal answer. A written response was typically given only if the person seeking the information asked for a written response (e.g., for a liquor license, or financing from a bank).

On cross-examination by DSWA, Mr. Paradee testified that he was retained by ESE in early to mid-July of 2000 after the permit was granted.

On cross-examination by the DAFB, Mr. Paradee testified that Mr. Callahan, of Lane Engineering, requested a written response from Mr. Crumpley and was told none was required. He does not know what DNREC's policy is regarding requiring a written response.

15) The Board considered the testimony of Mr. William (Bill) Stoll.

Mr. Stoll testified that he is the sales manager for ESE. He has worked for ESE since they acquired the site. He worked for Bandurski and Modern Disposal in the same capacity prior to the acquisition by ESE. He has worked there for the past six years.

The witness testified that in his capacity with Bandurski, he hired a contracting firm to seek a permit to conduct a dry waste disposal operation. As part of the process he met with Mr. Ron Reed (from the Kent County Planning Department). He indicated they only needed approvals from DeIDOT, the Fire Marshal and the Kent County conservation district. They did not get anything in writing from Kent County. The Fire Marshall gave verbal approval, and the others sent letters within a week. That information was furnished to DNREC for the permit, and the permit was granted.

On cross-examination by the DAFB, the witness testified that in 1998, the permit went from a resource recovery permit to a dry waste transfer station. The permit clearly indicated there would be no MSW.

16) The Board considered the testimony of Mr. Bart Begley.

Mr. Begley testified that he is the President of ESE. He oversees the corporation and the national company, Eastern Waste Services, with the landfill in Virginia.

The witness testified that he was responsible for putting together the team to seek the permit modification. He met with the Kent County Planning Department. He understood at the time that zoning approval was part of the application process. The meeting was held on January 13, 2000. Present were Mr. Callahan, himself, Kelly Crumpley and someone from Bandurski. The purpose was to see if the zoning was in place to process MSW and what would be needed if they were going to expand the building. Mr. Callahan arranged the meeting. He informed Mr. Crumpley of the proposed change in the waste stream. They met at the counter, and Mr. Crumpley led them into a room with an engineering drawing of the property and a file folder on top of it. Sean Callahan explained the difference to Mr. Crumpley in the waste stream. Mr. Crumpley's response was that he understood the difference. He indicated he did not have the full history of the property. He had the last addition showing the footprint of the building. He indicated he wanted to get the file and go back in time. When he returned he had more drawings and he had other zoning approvals--the reclamation plant zoning approval from 1972 and the agricultural to industrial zoning change from 1976.

The witness further testified that initially they wanted to expand the facility, and they were told they would have to go through a conditional use permit process to enlarge the footprint of the building. They indicated that they did not want to do that, and Mr. Crumpley told them they would not need anything further provided they did not change the footprint

of the property. He said it was a "legal, non-conforming use", and when he sought clarification, he was told it was "grandfathered". After the meeting, Sean asked for something in writing. There was no response. He then called Mr. Crumpley, and was told they didn't need anything in writing. He then asked if they could have DNREC call the county. He then had Janet Manchester call Mr. Crumpley, and thereafter they got the permit modification. The cost involved for installation of a lechate system, making changes to the concrete floors, and making changes to the doors was over \$500,000.

The witness testified that subsequent to receiving the copy of Ms. Holland's letter, he was on the line for a telephone call between Mr. Shaener and Ms. Holland. She told them that Kelly Crumpley had made a mistake and that they had done everything right. She offered to waive the fees and help them through the conditional use process. She did not tell them the mistake was due to a lack of information or misinformation from ESE.

On cross examination by DSWA, Mr. Begley testified that the improvements to the ESE facility started in the beginning of May, 2000. They were completed in about six weeks. The modifications had to be done prior to receiving the waste. They waited until there were no comments in the permit process. The witness disagreed that they did not need to make the improvements prior to receiving the permit. He could not start taking trash until the improvements were made. They paid approximately \$5.5 million for the facility—including equipment, trucks, etc.... At the time they made the purchase, they did due diligence to see if there was the possibility for expansion. They could have made a go of it as a dry waste processing facility.

On cross examination by DAFB, Mr. Begley testified that he has at least 15 years

experience in processing MSW. He has been involved in siting other transfer stations and landfills in other states. He was aware of the FAA circular, and the consultants told him it was not applicable. He did not notify DAFB of their intention to handle MSW. It was not until the DAFB learned of the permit that the DAFB informed them of their concerns. Comments were made by the DAFB that they needed to research the issue further. They had no issues with the facility itself. Colonel Fentress commented on the cleanliness of the facility. In his conversation with Colonel Wuesthoff, they agreed to disagree.

On re-direct examination, Mr. Begley testified that there is a disadvantage to not handling MSW. There is a greater volume of MSW and it is consistent. Construction debris is cyclical.

17) The Board considered the testimony of Mr. Sean Callahan.

Mr. Callahan testified that he is employed by Lane Engineering as a project manager.

Mr. Callahan testified that he assisted ESE on the permit modification. He arranged the pre-application meeting with the Kent County Planning Office to discuss a new application for a site plan. He spoke with Kelly Crumpley prior to the meeting. He told Mr. Crumpley that they wanted to increase the size of the building and wanted to confirm the zoning process. He told him where the property was located. The meeting took place on January 13, 2002. At the meeting they discussed the proposal generally. Mr. Crumpley had some folders available on the property: some zoning history. As they got further into the process, they learned there would have to be a substantial amount of review and it

would take several months to expand the site plan. Mr. Crumpley then left and brought back the zoning history of the property. Mr. Begley explained the change in the waste stream. Mr. Crumpley did not consider it a change in use as there was no distinction in the regulations between dry waste and MSW. It was a legal, non-confirming use that could expand within certain limits. Mr. Crumpley suggested that if they could live within the existing footprint of the building there would be no need for a site plan review. There was no neat category for the zoning use on the property that they could fit into. Typically, the process is a verbal discussion and a review of records. Mr. Crumpley asked him to send a letter to confirm what they were seeking and the layout of the property. Mr. Crumpley later called and indicated there would be a problem if they intended to move a fuel tank from off the property. They chose not to do it and he indicated that no further review was necessary.

The witness testified that in regard to the DNREC application process, there was a boundary and topographic survey. This was the first thing they did as part of the process. They also submitted an engineering report from a licensed Delaware engineer.

On cross examination by Hegman/DSWA, Mr. Callahan testified that he learned from Ciara O'Connell that they needed zoning approval for DNREC. He was under the impression that the letter would be forthcoming once the gas tank issue was resolved. Mr. Begley indicated to him that it was no longer his responsibility to get the zoning approval. It was his understanding that verbal confirmation between the two "State [sic]" bodies would suffice. It was also his understanding that grandfathered uses are permitted within certain limits. He was present during Tom Houska's testimony. The witness testified that

he is not familiar with the DNREC regulations. He does not know whether their topographical maps would comply with DNREC regulations.

On cross examination by the DAFB, the witness testified that the renovation would include a new concrete floor. Part of the plan was to put doors on the facility. He cannot recall that DAFB was mentioned in the pre-application meeting. They did not bring up a potential conflicting use with the DAFB that is part of the Kent County comprehensive plan. He was introduced to the history of the site at the meetings with Kent County. He was aware there was a zoning change in the past, but he was not aware when that occurred. He is not sure what zoning ordinance was in effect at the time of ESE's predecessors. He had no involvement with the DSWA regulations or any possible approvals.

On re-direct examination, Mr. Callahan testified that if there was an issue regarding notification of DAFB, he would have expected Kent County to explain the need to contact DAFB.

18) The Board considered the rebuttal testimony of Dr. Nicholas Carter.

In rebuttal, Dr. Carter testified Dr. Davis made an assumption in preparing his exhibit (ESE Exhibit #6) that did not contain correct information. That assumption was that Border Collie Rescue was involved with reporting extra bird strikes. They prepared the information and took the information out that would have come from them. The information represented in the first graph has not changed since 1985. They notify the base of additional bird strikes, but there is no official paperwork. That was the information taken out. There were 18 "unreported" bird strikes between June of 2000 and December of 2001

(ESE Exhibit #4). There would be 3 or 4 times more if it included the Border Collie Rescue information. The graph has been normalized. It shows an increase in the number of bird strikes over the last 3 or 4 years. He cannot say that the activity at ESE is the cause of that increase, however, he worries that the numbers are increasing--the potential for a disaster it represents.

On cross-examination by ESE, Dr. Carter testified that bird strikes in the graph come from two sources--pilots and mechanics. The "unreported" strikes can come from a number of other sources, and they do not come from those sources as the paperwork is not filled out. The assumption Dr. Davis made is that the wildlife biologist coming on board is increasing the sensitivity and increases reporting. He does not believe that the reports from the pilots and the mechanics has changed because he did not go to them. There may be a heightened awareness. He understands the function of the last graph (in ESE Exhibit #6), but he is not sure it is accurate. Initial damage estimates for serious strikes can vary from the final result and may drop off the chart. The floor for the damage amount can alter the results as well.

19) The Board considered the testimony of Ms. Jamie Rutherford.

Ms. Rutherford testified that she has been employed with DNREC for 14 years and has worked since 1999 with the solid waste branch. She is a program manager I who oversees the waste management group. She manages about 8 staff--primarily responsible for hazardous waste sites and permitting landfills and transfer stations.

The witness testified that there was solid waste processing at the ESE site prior to

DNREC involvement. There was tire shredding and the recycling of plastics prior to 1997. In 1997 the Department received a request for a resource recovery operation permit: a recycling operation. The application was put on public notice and no comments were received or a hearing requested. In the winter of 1998, another application was received for a transfer station. This was also put on public notice. There were no comments received and no hearing requested. This placed no limit on the amount of dry waste to be processed. With regard to the ESE application, Janet Manchester did the processing. The witness, personally, approved the draft public notice and the draft permit. She then gave it to her supervisor, Nancy Marker. She noted nothing unusual about this application. The permit modification was drafted, reviewed and approved. Janet Manchester discussed her conversations with Kent County regarding the zoning approvals. This occurred after the permit was issued. She spoke with Kelly Crumpley and was told that everything needed or required had been given and it had been approved.

On cross examination by ESE, Ms. Rutherford testified that where the only addition is the MSW stream, the applicable provisions would be the transfer station modification section.

On cross examination by DAFB, Ms. Rutherford testified that Janet Manchester reported directly to her at the time. Janet Marker is her manager. The ESE site was permitted as a transfer station. She did not read the application and is not aware of whether it addressed resource recovery efforts. With regard to DNREC's regulations, she agreed that section 9(B)(2) allows no processing of MSW within the FAA setbacks. She further agreed that under 10(A)(2)(b) a facility that processes as a material recovery facility

is not a transfer station. Section 4(D) applies to "new" permit applications for resource recovery facilities. It outlines the requirements for the application and permit for a resource recovery facility.

On cross examination by Hegman/DSWA, the witness testified that she did not review the application--Janet Manchester did. She does not recall whether she reviewed the regulations before the permit was issued. She does not know whether anyone else did. She was not aware this was the largest transfer station in the state. The Department relied upon Janet Manchester's assessment regarding this permit. She was aware that the issue of notification to DSWA came up at a meeting (reference Hegman/DSWA Exhibit #18, last page--minutes of 1/20/2000 meeting). She recalls notifying Tom Houska of the permit approval. The Department issued a transfer station permit. The permit does allow partial recycling, however, basically it is a transfer station. It permits recycling a "small portion". She would want to know what was in the application before placing a limit on the amount to be recycled. She does not believe this facility falls within the definition of a resource recovery facility. It was a permit modification for a transfer station. Section 9(B) applies to a resource recovery facility. No FAA waiver was obtained. The nature of the request determines the applicable section. What the operation "mainly is" determines what the permit will be.

On re-direct examination, Ms. Rutherford testified that sections 9 and 10 do not apply in regard to a solid waste modification to a permit.

On re-cross examination by the DAFB, Ms. Rutherford testified there is nothing in the regulations requiring only one section of the regulations to be considered.

20) The Board considered the testimony of Ms. Janet Manchester.

Ms. Manchester testified that she has been employed by DNREC and worked in the solid waste branch for 15 years. She is an environmental scientist.

In February and March of 2000, she spoke with Mr. Kelly Crumpley regarding the zoning status for this facility. She first said they received a permit application for a solid waste facility and by law couldn't issue the permit without it being in compliance with county zoning laws. She asked who she needed to speak with and identified the facility. Mr. Crumpley replied that he was the person who met with ESE personnel. She explained to him they were permitted for dry waste and defined the term. She indicated that the permit was to process MSW--household waste. She needed to know whether they met all the zoning requirements for the proposed facility. He indicated he needed to review the files. The next day he called back and indicated that he recalled the meeting and told them they met the zoning requirements. She asked whether they were in full compliance with the zoning laws and he indicated they were. She met with ESE personnel and told them they needed proof all zoning requirements were met. She told them to go back and get something from the county in writing. ESE personnel called back and indicated that the county would not give them something in writing. This prompted her call to Mr. Crumpley. She did not relate any of this to her supervisors until after the permit was issued. She was comfortable going forward with the permit application after her conversations with the county. No one instructed her not to go forward without a written approval from the county.

The witness testified that a resource recovery facility essentially recycles material. A transfer station primarily aggregates waste from smaller vehicles to larger vehicles for

transportation to a disposal facility. To get a transfer station modified, a letter requesting the modification is submitted. Then, on a case-by-case basis, the applications are reviewed. There were a number of changes between the time of the initial application and the application as presented for public comment. The main change was to the lechate collection system. The consultant submitted the modification on a standard solid waste form because any issues to be addressed would be identified as if it were a new application. It included a plan for the operation of the facility. In her opinion it met the requirements of section 10 of the regulations. It did not have a hydro-geological report. A hydrogeologist from the Department had previously walked the site and determined that no hydrogeological report was necessary. This was with regard to the dry waste facility. With the ESE application, she again consulted with the department's hydrogeologist who did not see a need for an assessment. A hydrogeological report is discretionary by the Department even for a new application.

The witness further testified that the environmental assessment was adequate and the permit application contained a topographical survey. She reviewed the entire application and compared it with the requirements of the regulations and with other permit applications for transfer stations. She made certain changes, and when it was satisfactory, she submitted the public notice to Ms. Rutherford. She drafted the permit. There is a requirement in the permit for ESE to maintain the site in a litter-free condition.

On cross examination by the DAFB, Ms. Manchester testified that she did not get the zoning approvals in writing because she felt that Mr. Crumpley's assurances were sufficient. She is not aware that her section always required written approvals. Another

section in the Department has such an agreement with the county. She cannot recall an instance other than this one where Kent County did not prepare something in writing. She was not aware of the actual zoning for this property. The witness testified that she did not treat it as a new permit. She looked at only those things that would be changing due to the addition of the new waste stream. She reviewed it in light of Section 10 as it needed to meet the requirements of a transfer station. She was not sure what the permits were for the facility prior to 1997. She was aware they were engaging in recycling prior to the permit modification application. She was aware that the ESE application indicated the facility would have uses consistent with the historic uses of the property. The previous uses of the property involved resource recovery. The regulations did not require an assessment of the impact of the facility on flight safety. ESE was involved with recycling--a form of materials recovery. Resource recovery and materials recovery are the same thing. She was concerned with the lechate because it is in the transfer stations section, and the flight safety issue is in the resource recovery section. She applied only the transfer station section. As far as she was aware, the DAFB was not contacted regarding this permit application.

On cross-examination by Hegman/DSWA, the witness testified that she told the applicant that they needed to get something in writing. She agrees that "proof" is required of the zoning approvals, but that it need not necessarily be in writing. She agrees that under the applications procedures for transfer stations (Regulation 4(E)(1)), the information is required to be a "submission by the applicant". The witness did not require this because she believed what she was told by the county, and she knew the applicant had made

efforts to obtain it in writing and could not get it. She personally did not request the county's opinion on the zoning in writing. She did not utilize the checklist for an initial or new permit application, and there is no such checklist for a permit modification application.

The witness further testified on cross-examination, that the environmental assessment includes a traffic assessment. The permit application indicated no significant increase in traffic volume. She based her review considering the previously permitted levels and considered the additional 220 tons per day. The analysis was based upon the theoretical limits and not the current levels of operation. She has not reviewed the November 2001 compliance report. She believed there would be an increase in truck traffic, but she did not think the increase would be enough to justify a traffic impact study.

The witness further testified on cross-examination, that she did not consider Section 9 of the regulations at all in considering this regulation. She is not aware of anyone with expertise in the area of wildlife management related to flight safety concerns.

On cross-examination by ESE, the witness testified that there was no traffic impact study for the Pine Tree Corners transfer station permit renewal application. [ESE stipulated that a traffic impact study was done when the Pine Tree Corners facility was initially permitted]. The area surrounding the ESE facility is not a densely populated area. Even if a facility processes non-MSW waste only, they would still look toward the transfer station regulations.

On re-direct examination, Ms. Manchester testified that prior to this permit application, the facility was permitted as a transfer station. Not all solid waste regulations are applicable to all permit applications. There are approximately ten (10) transfer stations

located in the state. All process MSW. Resource recovery facilities handle anything from industrial ash, contaminated soil and MSW. If a facility processes multiple streams of waste, the Department places that facility in the section that most appropriately conforms to the mission of the facility, and conditions will be placed in the permit to ensure appropriate environmental protection.

On re-cross examination by Hegman/DSWA, the witness testified that the facility was permitted to do some recycling.

On re-cross examination by DAFB, the witness testified that a permit is issued for the primary purpose of the facility. The application is placed into the most appropriate section unless the other activities would prohibit the classification under that section.

On examination by the Board, the witness testified that they consider the intent of the applicant when looking toward which regulatory section is applicable. She does not know why the FAA requirement exists in the one section but not in the other. There were different workgroups working on the different sections. Most resource recovery facilities operate in a building.

21) The Board considered the testimony of Ms. Nancy Marker.

Ms. Marker testified that she has been employed by DNREC for the past 15 years. She has been in the solid waste branch since 1998. She is an Environmental Program Manager II and oversees the entire branch of approximately 25 employees.

The witness testified that the ESE permit modification was considered a major modification. She was presented with a recommendation to issue the permit and she

approved the permit based upon that recommendation. She did not discuss the permit process with Janet Manchester. No zoning issues discussion occurred prior to the issuance of the permit. Ms. Marker testified that she felt it was acceptable for Ms. Manchester to rely upon the oral representations of Kent County. There have been subsequent changes because of this case including the requirement of written proof of zoning. She believes there are eight transfer stations permitted in the state. Of the eight, three are DSWA facilities. All are permitted to receive MSW.

On cross examination by the DAFB, Ms. Marker testified that she is not aware of any transfer stations located within 10,000 feet of an airport. The issue regarding the location of the ESE facility near the DAFB runway was not raised or discussed. The permit modification section does not refer one to other sections of the regulations.

On cross examination by DSWA, the witness testified that she did not feel it necessary to consult with the DSWA on this application. She does not recall making a statement at the January 20, 2000 meeting with the DSWA that DNREC would keep the DSWA informed of any application from the ESE facility. The Department relies upon the notes from the meetings--not a transcript.

On cross examination by ESE, Ms. Marker testified that introduction of the MSW stream was the major change to the permit. The resource recovery portion did not involve the MSW.

On examination by the Board, Ms. Marker testified that there is approximately one major permit review performed by her branch every other week involving waste facilities. She does not know why the FAA setback recommendations were not included in the

resource recovery facilities regulations. The FAA setback provision is also in the industrial waste landfill section.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The appeal as presented before the Board consisted of two primary issues. The Board considered each in turn. Before turning to those issues, the Board has a comment regarding the pre-permit interaction of the parties and the agency's application of its statutory notice provision.

Both Mr. Shaener and Mr. Begley have worked in the waste disposal industry for many years. They are both familiar with the FAA circular, and its concerns with potential wildlife hazards. Both are aware of the proximity of the ESE facility to the DAFB runway. Nonetheless, they chose not to engage the DAFB before and soon after they filed their application to add MSW to the waste stream. One can only infer that they knew DAFB would be opposed to the permit. The Board did not find credible Mr. Begley's explanation that he relied upon his consultants who told him the FAA circular was not applicable to his facility. One of those consultant's, Mr. Sean Callahan, testified that he expected Kent County to tell ESE if they needed to contact the DAFB if an application was filed. In this instance, however, because no application was filed, and no process begun, Mr. Callahan would have known that the DAFB would not be directly notified by Kent County. Moreover, given their representation in the permit application that the facility operations should have "minimal impact on existing or surrounding land uses...", and given the lack of adequate review by DNREC, this practically assured that no government authority would contact the

DAFB regarding the proposed modifications to the permit. As DNREC considered this permit application to constitute a major modification, DAFB should have been involved from the very beginning without having to rely upon a chance sitting in a newspaper of a notice that—while perhaps satisfying the minimum public notice requirements—provided little useful information to potentially affected parties. Unfortunately, too many people dropped the ball here. We must keep in mind that the overall goal is to protect the public and protect the environment: not whether the agency followed its regulations to the letter; who said what in the Kent County planning/ zoning process; or, whether the permittee took advantage of the lack of communication amongst the public players in this process.

A. *Permit Application Review Process*

The first of the primary issues in contention is whether DNREC properly considered, processed and approved ESE's permit application. Within this issue, the parties presented evidence regarding DNREC's consideration of the applicable zoning approvals related to the site.

The Board found DNREC's review of this permit application to be inconsistent with its regulations and its prior practices.

DNREC's witnesses acknowledged they considered ESE's permit application to be a "major" modification of the permit. Only one major modification involving a waste facility is reviewed by the solid waste branch every two weeks, so one would expect this application to receive greater attention and scrutiny. Despite this acknowledgment and the fact the ESE facility, as permitted, would be one of the largest (if not the largest) transfer

stations in the state, the decisions related to the permit were left to a lower level employee in the branch's permitting review process. There was no effective review by anyone in the management chain at DNREC. There was insufficient documentation (not even a checklist) of the process to facilitate a review by management. Ms. Manchester's supervisor was not even aware that the ESE facility might be the largest transfer station in the state if permitted at the requested limits. The head of the branch admitted that she essentially just "rubber stamped" the permit. Neither supervisor read the application. They simply relied upon the judgment of their subordinate. As a result, the agency did not catch the mistake that resulted in this appeal.

This lack of meaningful review by management appeared to be symptomatic of a formulaic approach to the review of important permit applications. It appeared from the testimony of Ms. Manchester (who reviewed the permit application) that the type of permit application practically determined the process taken in its review. If it was a modification of a transfer station permit, then section 10 of the regulations (and only section 10) was considered, and no one bothered to consider the potential applicability or relevance of other provisions of the regulations. Ms. Manchester testified that this was her approach. Certain parties have argued that the agency should have considered other provisions of the regulations (in particular, provisions in section 9 regarding resource recovery operations) if the facility in question is operating in a dual capacity. In response to this argument, Ms. Manchester testified that if a facility processes multiple waste streams (such as the ESE facility), DNREC places that facility in the section that most appropriately conforms to the mission of the facility, and conditions will be placed in the permit to ensure

appropriate environmental protection. One must ask from where these conditions are derived. Permit conditions applicable to a facility permitted under a different provision of the regulations could apply to a facility operating in a dual capacity but permitted under another section of the regulations. A transfer station is an adjunct to any recycling operation: it is difficult to separate the two operations. Accordingly, the argument that provisions of section 9 of the regulations may also be considered is a valid one. This possibility was not even considered in the review of this application. Instead, Ms. Manchester applied the usual approach which was to pigeonhole the application. While such a formulaic approach by lower level personnel may be acceptable, there was no one in a supervisory position who sufficiently reviewed this application and permit to provide a broader prospective and catch any errors in judgment.

The acceptance of non-written proof of zoning is a critical indication of the agency's lack of appropriate review in this matter. The question one must ask is: if this is a "major" modification, then why wasn't the proof of zoning provided in writing? The testimony of the DNREC witnesses indicates that the prior practice was to require written proof. Ms. Manchester testified that this was the only instance she could think of where the county did not provide written proof on the zoning issue. Ms. Marker testified that there was no prior precedent regarding the acceptance of oral representations of zoning. Despite the prior practice, however, she felt it was acceptable in this one instance for her subordinate to accept the verbal representation of another subordinate at the county. While one deviation from the practice might be acceptable to Ms. Marker, apparently others at DNREC did not believe this to be the case, as the prior practice of receiving written proof has now become

policy. Here, Ms. Manchester made a mistake in judgment and there was insufficient review by management to catch that mistake prior to the issuance of the permit. Ms. Marker's attempt to justify the action after the fact is not credible. The Board would not be hearing this appeal had the agency followed its prior practice and requested the zoning certificate in writing.¹

In addition to the zoning compliance proof issue, the Board also found fault with the agency's review of those portions of the application pertaining to truck traffic and air quality (i.e., dust and odor control).

In the ESE permit modification application, ESE represented to DNREC that there would be no increase in traffic volume. While DNREC has contended that the difference in the previously permitted levels and the new permit levels is an increase that did not justify a traffic study, the Board does not agree. Prior to the modified permit being granted, the ESE facility did not handle more than 180 tons per day of solid waste. This amount was not even half of the previously permitted limit. By May of 2001, the amount had increased only to 188 tons per day. In May of 2001, however, Mr. Shaener informed Master Sergeant Don Hall at the DAFB that ESE intended to increase its tonnage by 50 tons every six months. Mr. Shaener expected that ESE would meet its permitted limits by 2004. Mr. Shaener estimated the current traffic volume of 60 round trips per day with an incremental increase of 7 round trips per day per every 50 ton increase.

¹The Board does not place blame for the missing written proof of appropriate zoning entirely on the shoulders of the agency. As it is ESE's burden under DNREC's solid waste regulations to provide that proof as part of its application, its failure to do so in this instance contributed to the situation it now faces.

By the Board's calculations, in order to reach the permitted limits by 2004, ESE would have to increase its tonnage every six months by 80 tons per day. This would increase the truck traffic (according to Mr. Shaener's 7 round trips per every 50 ton increase) by over 11 round trips every six months. Using these projections, the number of round trips at the permit limits would more than double the May, 2001 traffic levels going in and out of the ESE facility. This is 30% more than the traffic estimate Mr. Shaener gave in his testimony before this Board. Moreover, the only breakdown of tonnage coming in and out of the facility that the Board has before it (from June, 2001), tends to support the estimates present by Mr. Thomas Houska of the DSWA.

Mr. Houska estimated an average tonnage per inbound load at 4 tons (contrasted to Mr. Shaener's testimony of an average of 12 tons), and he estimated an average tonnage per outbound load at 18 tons (contrasted to Mr. Shaener's testimony of an average of 21.5 tons). Based upon the June, 2001 breakdown, the average loads for that month were 4.97 tons inbound and 17.85 tons outbound. As the Board finds Mr. Houska's projections are the more probable, the projected increase in traffic at the permit limits would be over 3 1/3 times the May, 2001 levels. This increase certainly is higher than the representation in ESE's permit application that "[t]raffic volumes should essentially remain at its current level...." The increase is significant in contrast to ESE's underestimated projections.

The Board cannot ignore the enormity of this increase in truck traffic, and neither should have DNREC—despite the previously permitted levels. Given the cyclical nature of construction and its accompanying debris, it was unlikely that ESE would have come close

to the previously permitted levels without adding MSW to its waste stream. It was not reasonable for DNREC to consider only the increase in the permitted levels without assessing the reality of the situation and its potential effects. Such a threefold-plus increase in traffic will have an effect on the neighboring communities (including Ms. Hegman's) and the roads the public travels in this area. A traffic study should have been required.

In connection with the increased truck traffic will also be increased dust, litter and noise. In its permit modification application, ESE had likewise estimated a potential for "small quantities of dust in the immediate vicinity of the site due to truck traffic." The application represented that "regular sweeping and hosing down of work areas and cover of driving surfaces in gravel should prevent most dust creation." In the November, 2001 DNREC Compliance Assessment, however, the inspection revealed that "the on-site path used by trucks, was no longer covered with gravel. Traffic was causing dust to be airborne" The compliance officer indicated that, "I'm not sure that gravel is an adequate dust control for this facility." With the increased traffic going in and out of the facility, DNREC will need to re-assess the dust control issue.

With regard to odors, the permit application indicated that due to the solid waste being handled indoors "there should be minimal odor produced from the accepted waste." Should the odors exceed existing local levels, the corrective action would be fragrant sprayers or air deodorizers. Dr. Davis' testimony regarding odors from the facility was not consistent. He initially testified that the increased volume going through the facility means the "odor will go down." He later testified that it will result in "no more odor" than the

present levels. Dr. Davis performed no studies, and relied upon no studies, related to odor levels. According to him, his opinion was just "common sense." The Board disagrees with Dr. Davis and ESE's representations. The Board already knows there is more waste coming into the facility, and that some of it has been stored outside for greater periods of time than allowed in the permit. In addition, the more enclosed the facility, the greater need for ventilation and, accordingly, the more odor produced. It seems logical that the greater the volume of waste coming through the facility, the greater the odor produced. DNREC needs to further assess the odor control issues at this site.

Given our findings above, the Board concludes that the application by ESE was incomplete and the review process was flawed. As it is ESE's burden to provide proof of the appropriate zoning as part of its application, the application was incomplete. The review process was flawed for the reasons given above. As a consequence with respect to the first primary issue, the Board remands the matter to the Secretary with the following instructions:

- 1) The Secretary must instruct the solid waste branch to notify ESE that its permit application is incomplete. ESE will be required to complete the application and provide written proof of the appropriate zoning.
- 2) In the event the Court of Chancery enjoins Kent County from requiring ESE to undertake the conditional use review process, then the Secretary must continue to review the permit application in light of whether other provisions in the regulations may be applicable to the permit application. Given the agency is now well aware of the proximity of the ESE facility to the DAFB,

and aware that its regulations recognize the FAA setback recommendations, any further review would address whether the FAA setback recommendations included in section 9 have broader application to permits including those facilities with or without dual functions.

- 3) In connection with its review of the permit application, the agency shall require that a traffic impact study be conducted.
- 4) Should the agency approve any modifications allowing the addition of an MSW waste stream to the ESE permit, it will require as a condition of the permit that appropriate measures be taken to reduce the amount of dust generated by truck traffic, and that effective odor mitigation be implemented. The current method of dust reduction, and the proposal for odor mitigation, are not adequate.

Further instructions will follow the conclusions reached by the Board regarding the flight safety issue portion of this opinion.

B. *Bird Attractant/ Flight Safety Hazard Issue*

The second of the primary issues in contention is whether the site is a bird attractant/ flight safety hazard.

The Board initially finds that the ESE facility is a partially enclosed facility. We disagree with the Hearing Officer's finding that this is an enclosed facility, or that it could be converted into an enclosed facility simply with the addition of plastic strips on the doors, bird deterrents, and a litter free operating site. The Board agrees with the opinion of Mr.

Cleary as representative of the position of the FAA. Mr. Cleary was directly involved with the formulation and promulgation of the FAA circular No. 150/5200-33. None of ESE's experts could make the same claim. According to Mr. Cleary, an "enclosed" transfer station is one where the doors open, trucks enter, trash is dumped, and the trucks exit through another door which is then closed. There should be odor control and a process to ensure there is no leachate or trash attached to the trucks as they leave the facility. According to Mr. Cleary, the Atlantic County facility is the facility the closest to meeting this criteria. At that facility, the trucks actually drive into the building, dump their loads and drive out another set of doors. In contrast, at the ESE facility, the trucks back into one of two open doors and dump their loads. Evidence indicates that not all the trucks are entirely in the facility when their loads are dumped. Odor control is minimal and the doors are open during the hours of operation.

Dr. Davis' interpretation of what constitutes a closed or partially enclosed facility relies upon how animals respond to the facility. He emphasizes the "accessibility" to feed factor and the manner in which the facility is managed. The Board found that his definition depends in large part on how the facility operates and how the environment surrounding the facility reacts to it and not so much on the design of the facility. As Dr. Davis testified, "...as long as the transfer station operates the way it has been with the food inside, then it's not an attractant." Dr. Davis testified that the public should rely upon state regulators and its permit system to require the waste industry to meet certain criteria. He testified that "DNREC should have permit conditions that cover the eventualities." The Board interpreted the term "eventualities" to mean poor management of the facility. The Board

did not find Dr. Davis' opinions to carry the same weight as those of Mr. Cleary.

Unfortunately, the Board has seen too many instances where permit conditions have not covered "the eventualities" and situations where sporadic enforcement has not protected the public. The Board believes that the physical layout of the facility contributes as much, if not more, to public safety as would the proper management of the facility. By ensuring that a facility truly is "enclosed" as defined by Mr. Cleary, there is less of a chance that hazardous wildlife can enter it. There is less of a chance that spillage will occur outside the facility. The physical layout of the facility itself is a deterrent that reduces the opportunities for hazardous wildlife to access the waste. It relies less upon the hope that the facility will be well managed and the belief that the agency will enforce its permit conditions on a consistent basis.

The Board already doubts that this facility will be well managed on a consistent basis. During a time when the facility has been under scrutiny, it has accumulated violations as detailed in the November, 2001 DNREC compliance report. The report noted poor operational oversight with inspections not being conducted and the primary weighmaster not familiar with prohibited materials. The report indicated that inspections were being conducted more to meet record keeping requirements than to identify actual problems at the facility. These inspections are intended to identify and correct problems with litter, general housekeeping and odors among others. There were violations as well regarding the storage of waste outside the building and observations of commingled waste inside the building. Dr. Davis' observations contradicted Mr. Shaener's testimony that there was "minimal" commingled waste. In addition, at least one witness observed that the

door to the MSW waste dumping area was damaged. ESE's own expert, Dr. Southern, testified that if there were no other options, he would recommend siting a "closed" facility near an airport if it were "well operated." The evidence before the Board indicates that at present, the facility is not always well operated.

The Board also doubts that it can trust the ESE management to properly maintain and police its operation. In addition to the permit violations, ESE is not filing reports to the DSWA that the DSWA contends are legally required. There is some dispute between the parties whether the DSWA has jurisdiction over ESE in this regard, however, until this dispute is addressed, the question remains why ESE has not been in compliance. If neither the DSWA nor DNREC are sufficiently monitoring what is going in and out of this facility, and where it is coming from and going to, then the oversight is not sufficient. ESE's argument that DNREC is the public's protection against potential ESE mismanagement is flawed without sufficient oversight and monitoring.

In addition, the Board did not find the testimony of either ESE officer to be particularly credible. With the exception of his time on the stand, Mr. Shaener's demeanor throughout these proceedings was inappropriate.² The Board also noted Mr. Shaener's, and ESE's, propensity to understate the effects that the facility will have on its neighbors and the environment. As noted previously, ESE consistently underestimated the effects of the increased truck traffic in its permit application. The Board also felt that Mr.

²As the Board faces the parties and the members of the public, it cannot help but observe their reactions to the testimony. Mr. Shaener expressed amusement on numerous occasions during testimony involving issues that the Board takes very seriously. His amusement was shared primarily with Mr. Begley.

Shaener's representation of what his videotape intended to show was less than candid. It was clear to every member that the tape was not an impartial representation of the ESE facility and its environs. The Board gave it very little weight.

The question that has been most disputed in this proceeding is whether the ESE facility attracts hazardous wildlife. We agree with the finding of the Secretary's Hearing Officer in his June 4, 2002 report that there are significant bird populations naturally occurring in the area of the DAFB—particularly when the migratory birds are in transit. The Board does not agree with a finding that there is a naturally occurring, baseline population that can be identified at present. While some of the experts have referred to a "baseline", the reality is that we do not know what that baseline is as there were no bird studies conducted prior to the ESE facility processing MSW. We further disagree with the Hearing Officer's finding that there is no credible evidence that the birds are changing their behavior due to the ESE facility. The Board finds that the facility does attract hazardous wildlife.

The Board has considered the testimony of several expert witnesses on this issue. The Board characterizes Drs. Davis and Southern as the waste disposal industry's experts with a bias towards that industry's position, and the Board characterizes Dr. DeFusco as a little overzealous in his advocacy for the Air Force's position. It found the testimony of Dr. Nicholas Carter to be forthright and his observations and opinions credible. Dr. Carter's testimony carried considerable weight with the Board. The Board found his testimony regarding the activity of vultures in the area to be of concern. Dr. Carter testified that vultures are attracted to a site because of its odors. He testified that before he became aware of the existence of the ESE facility, he could not explain the behavior of the vultures

above and near the ESE facility's location. Once he became aware of the facility, and the fact it was processing MSW, then the explanation for the behavior became apparent.

According to the DAFB bird strike statistics, there were two (2) vulture strikes in 2001 (one "serious" as defined by Dr. Davis). Dr. Carter also testified that there was one near miss with a vulture in June of 2000 in the proximity of the ESE facility. That would constitute at least three known incidents involving vultures in a two year period. Both Drs. Carter and DeFusco found that to be significant. Dr. DeFusco testified it was significant because the only other air bases with similar strikes were two bases near landfills. Dr. Carter believes the vultures are attracted to the ESE site and that attraction will grow as the odor level at the facility increases. More vultures will be attracted to the site as they handle greater amounts of MSW. He further testified that even though they may not be feeding on the MSW in the building, they are flying above the site. That poses a greater danger to flight safety as the birds are in the air close to the runway.

Combined with Dr. Carter's testimony are Dr. DeFusco's actual observations on two separate occasions. In 2001, Dr. DeFusco observed a group of vultures tearing into a bag at the side of the road leading to the ESE facility. In 2002, he observed a vulture soaring above the ESE facility for 15 minutes. While neither Drs. Carter nor DeFusco could prove that the vultures are attracted to the ESE facility, Dr. DeFusco testified that he could not disprove it either, and Dr. Carter testified that he considers the vultures' behavior a pattern and the attraction to the ESE facility a rational explanation.

In addition to the testimony of Dr. Carter and the observations of Dr. DeFusco, the Board also considered the observations of Lt. Colonel Fentress who saw small birds flying

into the facility in June of this year.³ The testimony of the expert witnesses indicated that at least one species of the observed birds would feed on MSW. Even small birds can force a plane to land, and according to Lt. Colonel Fentress, 70% of the bird strikes are small birds.

Having found that the ESE facility is not an enclosed facility as defined under the FAA circular, and having concluded that the ESE facility attracts hazardous wildlife, the Board reviewed the FAA circular and concluded that the FAA would consider the operation to be incompatible with safe airport operations unless it were outside the FAA separation distances. It is not disputed that the ESE facility is well within those separation distances being 1,500 feet or less from the DAFB main runway. Even Dr. Southern agreed that the 10,000 feet separation distance would be applicable if Mr. Cleary's interpretation were accepted.

The question the Board must address is how these findings and conclusions regarding hazardous wildlife and flight safety affect the permitting process in this case. On an appeal to the Board, the burden of proof is typically on the appealing party. In this case, however, the Board is hearing evidence on the wildlife hazard/ flight safety issue in the first instance. While the Secretary and his Hearing Officer considered the issue in connection with a request to stay the permit, no appeal from that determination is before us, and the

³The Board notes that this evidence of birds accessing the ESE building did not exist at the time of the DNREC Hearing Officer's consideration of the stay request related to the flight safety issue.

standards related to reviewing a request for a stay are not applicable in this proceeding.⁴ There is little guidance in the caselaw as to how the Board should address this issue. Given the following analysis, however, the Board concluded that on an initial review, the burden would be on the permittee to establish the entitlement to the permit modification.

We agree with the Hearing Officer that while the FAA circular is not binding upon the DAFB, it is the best guidance available to us. In addition, the EPA Regulation at 40 CFR §258.10 is helpful in the analysis. These two sources must be read in conjunction with each other. Subpart 2.2.1 of the EPA regulation requires landfills within the FAA separation distances to demonstrate that they are designed and operated so as not to pose a bird hazard. In subpart 2.2.2 of the EPA regulation, reference is made to the FAA's position regarding landfills handling MSW being located near an airport runway. The five mile separation distance is specifically noted and notification is required to be given to the FAA for purposes of its review and the affected airport. Under subpart 2.2.2, owners and operators who cannot demonstrate the landfill does not pose a bird hazard must close the operation. Under the EPA regulation, the burden is on the landfill owner/operator to demonstrate it does not pose a bird hazard. This regulation was adopted in 1991, prior to the issuance of the FAA circular in 1997.

Section 4-2 of the FAA circular, in turn, refers back to the EPA regulation. The

⁴The Board is aware that the Secretary has not had a full opportunity to consider the flight safety issue as part of DNREC's review of the permit application. We may infer from the Hearing Officer's report on the request to stay the permit that while the Secretary likely would have granted the permit, there would have been additional conditions and limits attached.

Board notes the FAA circular infers that the five mile separation distance notification requirement in the EPA regulation applies to all “waste disposal operation[s]”. Thereafter, in the second half of the paragraph Section 4-2 refers more specifically to MSW landfills which are the focus of the EPA regulation. In between the promulgation of the EPA regulation and the release of the FAA circular we know that the FAA became more concerned with “waste disposal operations” other than just MSW landfills. The earlier EPA regulation would not have reflected the adjusted focus of the FAA. It is evident, however, that the EPA regulation intended to encompass the policies of the FAA pertaining to waste disposal operations in general. Mirroring the EPA regulation, subpart (c) of Section 4-2 of the FAA circular also places the burden on the owner/operator to establish “convincingly” that the facility will not handle putrescible waste other than as outlined in Section 3-2.

While these two references are only guidance to the Board, it is evident that both the FAA and EPA intended the burden to be on the owner/ operator of the waste disposal operation to demonstrate—convincingly in one case—that the facility does not pose a bird hazard.

In this case, ESE has not made such a demonstration. While the evidence does not establish convincingly that hazardous wildlife is attracted to the ESE facility, the Board has found by a preponderance of the evidence that such wildlife (i.e., birds) is attracted to the facility. More in point, ESE has not met its burden of establishing that the facility does not pose such a hazard.

Because the Secretary has not had the opportunity to address the wildlife hazard/ bird safety issue specifically in connection with the review of the permit application, the

Board must remand this matter to the Secretary on the second primary issue as well. Given the realities of a two-day hearing on this issue before the Hearing Officer, and the divergent findings between the Secretary and the Board, the Board must do so with additional instructions:

- 5) As the bird hazard/ flight safety risk poses an environmental risk to the public, and as the Secretary is empowered to protect the environment in the interest of the public's health and safety, the agency shall review the permit application (once it is deemed complete) in light of the bird hazard/ flight safety risk. In so doing, the agency shall find that the ESE facility does attract hazardous wildlife at its pre-cap operating levels, and that it is not an "enclosed" facility. The agency shall further find that the addition of a bird deterrent grid and plastic strips on the doorways of the ESE facility will not change the status of the ESE facility from that of a partially enclosed facility, and that the agency will apply the definition of an enclosed facility as interpreted by Mr. Cleary. The Board realizes that further review by the agency may involve changes to the ESE facility's footprint and site plan. Given these findings, the agency (whether or not it determines the FAA recommendations in section 9 of the regulations are applicable to permit reviews applying other sections of the regulations) shall consider whether the FAA recommendations should be followed in this case in light of the Secretary's authority to protect the environment in the interest of the public's health and safety. To assist the Secretary in making this determination, a

public hearing will be properly noticed and held.

- 6) Should the agency approve any modifications allowing the addition of an MSW waste stream to the ESE permit, it will require as a condition of the permit the proper maintenance of any closures at the facility and the proper maintenance of any bird deterrents required by the agency.
- 7) Should the agency approve any modifications allowing the addition of an MSW waste stream to the ESE permit, it will require as a condition of the permit continued monthly bird studies conducted by experts approved by the agency. Such studies shall attempt to establish a baseline of bird activity around the facility at the capped level imposed by the Hearing Officer. Should permit levels increase thereafter, continued studies shall be conducted on a monthly basis to assess any additional risk at the increased levels. The Board recognizes that in order to establish the baseline at the capped levels, the cap could remain in place for as long as one year or more. The studies may be utilized in determining whether any permit to process MSW is renewed.
- 8) Should the agency approve any modifications allowing the addition of an MSW waste stream to the ESE permit, it will require as a condition of the permit regular policing of the facility site and Postles Corner Road to ensure a trash and litter-free environment.
- 9) The agency must monitor the facility on an ongoing and regular basis to ensure it is in compliance with all conditions of the permit and ensure good

management practices at the facility.

- 10) Finally, while this matter is on remand, and the permit application is being reviewed, the Secretary shall impose conditions on the ESE facility that will reduce the risk posed by hazardous wildlife. The current cap of 2000 tons/month is recommended by the Board. The other conditions imposed in the Secretary's order of June 13, 2002 are also recommended as may be modified to assist the agency in compliance with this remand.

STATEMENT OF DETERMINATION

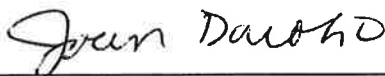
The Board ***remands*** this matter to the Secretary of the Department of Natural Resources and Environmental Control ***with instructions*** to be carried out in a manner not inconsistent with the above opinion.

SO ORDERED this 21 st day of October, 2002.

ENVIRONMENTAL APPEALS BOARD

The following Board members concur in this decision.

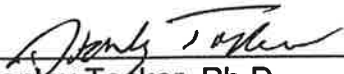
Date: 10/16/02



Joan Donoho
Acting Chairman

Environmental Appeals Board
Appeal No. 2000-10

Date: 10/15/02



Stanley Tocker, Ph.D.
Board Member

Environmental Appeals Board
Appeal No. 2000-10

Date: 17 October 2002


Peter McLaughlin
Board Member

Environmental Appeals Board
Appeal No. 2000-10

Date: Oct 17, 2002

Gordon Wood
Gordon Wood
Board Member

Environmental Appeals Board
Appeal No. 2000-10

Date: 17 October 2002


Peter McLaughlin
Board Member